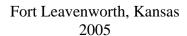
FRENCH GROUND FORCE ORGANIZATIONAL DEVELOPMENT FOR COUNTERREVOLUTIONARY WARFARE BETWEEN 1945 AND 1962

A thesis presented to the Faculty of the US Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE Military History

by

Peter Drake Jackson, MAJ, USA B.A., University of Rhode Island, Kingston, Rhode Island, 1992



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Evolving operations in the twenty-first century suggest a continued value for historical study of previous counterinsurgency operations. Study of such operations tends towards a degree of research into operational theory of security forces against insurgents. Application of counterinsurgency doctrinal guidance requires tailored organizational models for the participating ground forces. An example of an army which developed specific ground force organizational models in support of counterinsurgency is the French Army in the period between 1945 and 1962. This time frame includes the major counterinsurgent wars in Indochina and Algeria. The first facet of study is the French experience and organizational development up to the beginning of the Indochina War, during which many colonial concepts were applied to counterinsurgency operations. Next, a study of French adaptations for the Indochina War and lessons learned from that experience is presented which points out many lessons for counterinsurgency. Finally, the French organizational development in Algeria is studied as the penultimate example of the French model. Derived from previous colonial warfare experience, French organizations adapted to the modern counterinsurgency environment and ultimately could claim a military, if not political, success. Centered on the concept of the territorial organization of a theater, French organizational models for counterinsurgency possess enduring lessons for study and considered emulation..

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the US Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

FRENCH GROUND FORCE ORGANIZATIONAL DEVELOPMENT FOR COUNTERREVOLUTIONARY WARFARE BETWEEN 1945 AND 1962, by MAJ Peter Drake Jackson, 149 pages.

Evolving operations in the twenty-first century suggest a continued value for historical study of previous counterinsurgency operations. Study of such operations tends towards a degree of research into operational theory of security forces against insurgents. Application of counterinsurgency doctrinal guidance requires tailored organizational models for the participating ground forces. An example of an army which developed specific ground force organizational models in support of counterinsurgency is the French Army in the period between 1945 and 1962. This time frame includes the major counterinsurgent wars in Indochina and Algeria. The first facet of study is the French experience and organizational development up to the beginning of the Indochina War, during which many colonial concepts were applied to counterinsurgency operations. Next, a study of French adaptations for the Indochina War and lessons learned from that experience is presented which points out many lessons for counterinsurgency. Finally, the French organizational development in Algeria is studied as the penultimate example of the French model. Derived from previous colonial warfare experience, French organizations adapted to the modern counterinsurgency environment and ultimately could claim a military, if not political, success. Centered on the concept of the territorial organization of a theater, French organizational models for counterinsurgency possess enduring lessons for study and considered emulation.

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In short, this thesis would not have been accomplished without the support of the above individuals. While their support is acknowledged, any errors or deficiencies are solely the author's responsibility.

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CHAPTER 1

INTRODUCTION

Recueillire le maximum d'information afin de renseigner au mieux le Commandement sur les activites de l'ennemi dans leur Zone. Pour cela, monter des embuscades et executer des coups de main en territoire Vietminh. Observer les mouvements d'unites, surprendre des reunions politiques, desorganiser et decourager l'adversaire par des actions audacieuses permettant de realiser des recuperations d'armes et de faire des prisonniers. Enfin, opposer la contreguerrilla a la guerrilla, creer un climat d'insecurite permanente sur les arrieres de l'ennemi. 1

Jean-Pierre Pissardy, Commandos Nord-Vietnam

The French military had, by 1962, arguably won a military victory over its opponents in Algeria and had also developed a doctrine to conduct what they termed counterrevolutionary warfare.² Essentially a description of counterinsurgency but with an emphasis on political and psychological activities by the military and civilian authorities, this doctrine was developed from the French defeat in Indochina. This doctrine was then practiced in Algeria with military, albeit not political, success. The military lessons of these two vast counterinsurgency campaigns have been little digested in the United States--either in preparation for later involvement in Vietnam or for the American campaigns in Afghanistan and Iraq. The French lessons span the gamut of military application, but one area of particular interest is in the organization of ground forces. Counterinsurgency is necessarily a predominantly ground campaign, and methods for organizing counterinsurgent forces are of interest as organization will affect tactics, logistics, administration, and other aspects of the involvement. As the French had vast experience in the years between 1945 and 1962, with a large degree of ultimate military success, their ground force organizational development is of great enduring interest.

Thesis

The French developed ground force organization models adapted to conduct counterrevolutionary warfare between 1945 and 1962 based on their traditional colonial warfighting concepts and refined by technology and evolved opponents. These models were geared towards the territorial organization of the theater, supported by subordinate tailored organizations. These organizational concepts supported French operational theories of how to fight insurgents and in turn defined how the French were able to conduct such operations. These organizational constructs possess enduring interest to those considering current and future counterinsurgent operations. While one might disagree with the Jominian idea that all war may be reduced to formula, the French concepts of territorial organization for counterinsurgency and the related force structures to support such operations are worthy of continued study and possibly considered emulation.

Current Relevance

The relevance of French lessons in organizational development in Indochina and Algerian counterrevolutionary warfare may be questioned. No review of literature is possible thus far since there has been no analysis of French ground force organizational development. The French involvements in both conflicts were colonial affairs, the last of the large European imperial wars, with an emergent communist flavor to the war in Indochina and an emergent Muslim flavor to the war in Algeria. The lessons may in fact be even more important now than in the 1980's phase of the Cold War. While global communism has lessened since the fall of the Soviet Union, Communist China remains a growing power. Communist China, it will be seen, contributed the war-winning doctrine

and organizations to the Viet Minh that the French fought in Indochina. American involvement in the Middle East against Muslim terrorists and insurgents was predated by the French war against tactically similar elements in Algeria. In both Indochina and Algeria, conventional European organizations were modified to fight these enemies. The French lessons in these campaigns for today are therefore very relevant.

Key Terms

Before continuing, it is appropriate at this time to narrow the definition of terms used in this paper. The term French ground forces refers to any military force under French command capable of land operations. Naval and air forces which operate on land for the primary purpose of sustaining air and sea forces are excluded, but naval and air forces which operate out of their typical milieu do count, such as naval landing parties or riverine forces in Indochina or air force long range reconnaissance units in Algeria. Indigenous units are critical to consider as well--be they regular military or auxiliary--as they represented a large percentage of the overall French ground force personnel. Organizational development refers to the changes in French ground force internal organization as seen by formal tables of organization and equipment or by informal provisional organizations created in theater. The echelon may be from the theater level, such as the 10th Military Region in Algeria, down to the tactical unit level. Counterrevolutionary warfare is a term that was only loosely defined by the French themselves, and not always accurately, as when they accentuated Communist involvement in Algeria while undervaluing Muslim influence in the movement, but basically refers to counterinsurgency and is so used in this paper.³ The term counterrevolutionary warfare will be used throughout since not only was that the term the French used but also because of its connotation of the importance of psychological action, political integration with military operations, and other related facets, that are important to remember when considering French organizational development.

Historical Background

In 1945 the French found themselves with the simultaneous tasks of recovering from World War II, preparing for European defense, and reestablishing control over their empire. Their ground forces were clearly going to be stressed by these competing aims. The French Army was still reeling from its 1940 defeat--a defeat which was not easily explainable as a failure of the Maginot Line or lack of adequate numbers of tanks--and it was still reorganizing from the final Allied assault into Germany. The physical and economic devastation in France had economic and social implications that included a need for a reduced military--a need in competition with both the desire to build up European defenses and the desire to deploy expeditionary forces to reestablish the empire.

The French ground forces of 1945, which began operations to reestablish the empire in Indochina, were a mixed collection of units with a pedigree that included French organizational patterns from pre1940, British-influenced units, and American-influenced units. In fact, the French Army at the end of World War II was actually an amalgamation of several armies--the Army of Africa which had been rearmed by America and organized generally along US Army tables of organization, the original Free French units which had British influence, the Army of Armistice which included mainland Vichy units partially rearmed and reorganized along American lines, the various *maquis* which were integrated into the regular army in whichever fashion was

expedient given limited and disparate resources, and certain Colonial Army units in remote locations in sub-Saharan and North Africa.⁵ In late 1945, select units of these French ground forces began to return to Indochina.

The first operation of interest is the September 1945 to December 1946 French reestablishment of a semblance of colonial control over Indochina. This was accomplished by the French Far-East Expeditionary Corps, which was originally created as a special-purpose force to invade Indochina so as to wrest it from Japanese control in conjunction with in-place French elements permitted by the Japanese to continue to exist until March 1945, but which had changed to a mechanized corps that was to work in conjunction with Allied operations in the invasion of Japan. With the sudden surrender of Japan, the French Far-East Expeditionary Corps was the only force available to relieve British and Chinese forces that were supervising the surrender of Japanese elements in Indochina and to then concurrently reestablish control over Indochina despite native declarations of independence and in some areas de facto seizure of control. The French Far-East Expeditionary Corps deployed as fast as limited transportation permitted and found itself immediately employed while it gradually grew in size. It absorbed naval landing parties, released prisoners from the previous French garrison, and added newly deployed units. It almost immediately began reorganizing. American, British, and French organizations were standardized into formal French designs, and adaptations to the Indochinese environment implemented. The improvisational manner of these swift operations lent a swashbuckling aura to the forces involved, an attitude which would be handed down to successor units throughout the war with consequent impact on attention to organizational standardization.⁷

The Indochina War began in earnest in December 1946. The first phase lasted until November 1949 and consisted of initial sharp battles that drove the Viet Minh into the countryside, a nearly successful decapitation raid at the Viet Minh leadership and supplies (Operation Lea), and then desultory guerrilla warfare.

The conclusion of the Chinese revolution and the immediate offer to the Viet Minh of training, supplies, advisors, doctrine, and a sanctuary over the border introduced the next phase of the Indochina War. The immediate impact was the formation and training of a regular and highly capable Viet Minh Army, which made its operational debut by destroying the line of French fortifications along the isolated Chinese border known as the *Route Coloniale* 4 battles, destruction of which permitted even greater Chinese support to the Viet Minh. These devastating battles forced France to deploy one of its most able generals—General Jean de Lattre de Tassigny—to theater. He managed to rally the French with American aid, which was now freely provided given the Communist success in China and the outbreak of the Korean War, and new operational concepts.

During the year 1953 France became increasingly weary of the Indochina War, America demanded better results for its investment, and the Viet Minh continued to expand both its regular and irregular forces. The new French leadership coordinated an outline plan, termed the Navarre Plan after the new French commander in Indochina, for improving the military situation such that a successful negotiated settlement could be reached after the 1955-1956 campaign season. However, the fall of the airhead at Dien Bien Phu--which was defeated after a lengthy siege due to French inability to supply or support it against the unforeseen Viet Minh ability to mass against it--destroyed French resolve and left still-born the intended offensives.

Throughout this time period there were other activities that show organizational influence. There was Operation Musketeer in the Suez in 1956 and there was occupation duty and Cold War defense preparations in Austria, Germany, and Berlin. While largely organized along the European-conventional lines, units in these operations often took the character of the units in Indochina or Algeria--and at the Suez many were the same units. The *Javelot* (javelin) experimental design of large, mobile, unitary regiments combined in fours and fives into a small division bore much resemblance to the contemporary American Pentomic designs, but unlike their American counterparts, the French termed their units regiments rather than battle groups and had the opportunity to employ them in combat. The genesis of the *Javelot* design was the professional French senior officer corps, which concentrated on an atomic war in Europe, rather than in Indochina, but which would deploy their new *Javelot* units to Algeria.

The outbreak of revolution in Algeria was initially met with the available garrison troops in country, but forces were quickly expanded with levies from France and redeployments from Indochina. A significant difference between the wars in Indochina and Algeria was that French draftees and reservists were eligible for service in Algeria, thus eliminating the artificial troop ceiling that had constrained French operations in Indochina. Upon the conclusion of the Suez crisis, sufficient French mobile forces were also available for theaterwide offensives, or as the French termed them, intervention operations. Despite the ultimate political withdrawal from colonialism, the French army militarily defeated their opponents in Algeria in large measure thanks to an army resourced and organized appropriately for the task. The French had learned the military lessons of Indochina well.

The French lessons learned were described in Roger Trinquier's model organizational outline for counterrevolutionary warfare. He describes a theater organization that combines territorial and intervention units, as well as the employment of police tactics in urban counterterrorism and the establishment of friendly guerrilla movements in areas the insurgents use as their own base support areas. While his description of interrogation techniques caused his works to be largely shunned over the years and French withdrawal from the empire made his whole scheme seemingly irrelevant to a nuclear-armed France, his overall organizational structure illustrates poignant lessons learned from the successes and failures of French operations between 1945 and 1962.

Methodology

The methodology to examine French organizational development between 1945 and 1962 will be to examine the period in logical phases with a concentrated look at particular elements of ground force organization. There will be an evolutionary flow from which certain themes will be discernable and relevant lessons considered.

Chapter 2 will be the point of departure, which will examine the French counterrevolutionary warfare organizations of the colonial period prior to the Indochina War. This thesis will look at the situation at the end of World War II and at the ground force organization that deployed to reestablish control over Indochina. The particular elements to be examined will be theater organization, the organization of the infantry, the organization of mobile forces, the organization for supporting fires, and the organization of indigenous personnel.

Chapter 3 will examine organizational development through the Indochina war. Specifically, a brief examination of the war itself will be followed by in-depth analysis of the organizational developments of the concentrated topics introduced in chapter 2: theater organization, the organization of the infantry, the organization of mobile forces, the organization for supporting fires, and the organization of indigenous personnel.

Chapter 4 will then briefly examine the course of the Algerian War, followed by an in-depth analysis of the organizational development of the concentrated topics. This will complete the sequential analysis of the concentrated topics as well as conclude the history of major French counterrevolutionary warfare. Also examined at this point will be the doctrinal impact on organizational design that the French perceived from both their informal doctrine and their experiences in Indochina and Algeria. This will then lead to the conclusion in chapter 5, where a consideration of relevant lessons will be discussed.

Summary

What did the French deem necessary in terms of organizational development for counterrevolutionary warfare between 1945 and 1962? The final chapter of this thesis will summarize the French organizational development and then offer the resultant lessons from their experience. Deriving lessons from military history is always a risky proposition since so much of what passes for effectiveness is determined by the unique circumstances of the time. Nonetheless, there are clearly organizational lessons from the French experience of between 1945 and 1962 that could be considered relatively enduring. The task is simplified by the apparent accuracy of the French military itself in its contemporary lessons learned process. The survivors of the French Army had, by the end of the war in Algeria, accumulated a vast amount of experience from the period of

preWorld War II through Indochina and Algeria. They included in their numbers some of the twentieth century's most experienced warriors. That their society chose to largely ignore them for political reasons and that the rest of the world similarly ignored them do not detract from their military accomplishments and adaptations to counterrevolutionary warfare. The US military would be wise to consider their experiences.

¹Jean-Pierre Pissardy, *Commandos Nord-Vietnam* (Paris: Indo Editions, 1999), 23, mission statement for newly created commando units: "Obtain the maximum information on the enemy so as to inform the Command of enemy activities in their zone. Conduct ambushes and raids in Viet Minh territory. Observe the movements of units, surprise political meetings, disorganize and discourage the adversary by daring actions and capturing enemy weapons and prisoners. Lastly, oppose guerrillas with guerrillas, creating a climate of permanent insecurity in enemy areas."

²Roger Trinquier, *Modern Warfare: A French View of Counterinsurgency* (London: Pall Mall Press, 1964), 6-9, describes the final permutation of this "doctrine" which was never officially adapted by France, although as a practical matter was used by certain Colonial Officers as such and taught in psychological warfare courses.

³Peter Paret, French Revolutionary Warfare from Indochina to Algeria (New York, NY: Frederick A. Praeger, Publishers, 1964), 7 and 10.

⁴George F. Nafziger, French Order of Battle in World War II, 1939-1945 (George F. Nafziger, 1995), 90-91.

⁵Ibid., 90-91.

⁶Charles W. Koburger, *Naval Expeditions: The French Return to Indochina*, 1945-1946 (Westport, CT: Praeger Publishers, 1997), 12.

⁷Ibid., 91.

⁸General Y. P. Ezanno, quoted in A. H. Peterson, G. C. Reinhard, and E. E. Conger, eds., *Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: The Algerian War* (Santa Monica, CA: The RAND Corporation, 1963), 9.

⁹Trinquier, *Modern Warfare*, 72-93.

CHAPTER 2

ORGANIZATIONAL STATUS AND INITIAL DEVELOPMENT UP TO 1946

The subdivision of the theater into sections, each with its commander, its chain of posts, and its mobile columns may be said to be the first step towards dealing with guerrilla warfare effectively. It must be remembered that operations of this class generally cover a wide area and that considerable doubt often exists as to the position of the enemy's centres of activity. Clearing the country of supplies and, in some cases, rendering it impossible for an enemy to exist in the country at all owing to no food or shelter being left, may become part of the programme. If this is to be done methodically it can be most effectually carried out by areas, each with its responsible commander. If one area is disposed of easily while another gives serious trouble, troops can if necessary be transferred from one to the other and a rearrangement of boundaries may take place. It is the only plan by which a form of operations, which will always be harassing to regular troops and which may take an inordinate time to conclude unless method be brought to play, is likely to be carried out efficiently and economically.1

Colonel C. E. Callwell, Small Wars: Their Principles and Practice

French counterrevolutionary warfare organizations in Indochina and Algeria from 1945 through 1962 evolved from earlier experiences. An examination of the organizational developments to conduct similar operations in the century leading up to the Indochina War reveals that organizational concepts were often modified from previous concepts rather than invented in Indochina and Algeria. The French thus had a solid base of institutional experience with which to base later organizational models for counterrevolutionary warfare.

The Colonial Legacy

French counterrevolutionary warfare was necessitated by the post-World War II desire to retain important facets of its colonial empire; albeit after World War II

communism was a frequent factor in addition to traditional nationalism in native resistance to colonialism. This empire had been largely finalized by the late nineteenth century. Not only did this provide the geopolitical background for future conflict, but the military aspects of campaigning in nonEuropean environments against variably armed and trained native forces had ingrained some important concepts of operations and organization upon the colonialist that would be both successfully and unsuccessfully tapped after 1945 as a reservoir of concepts.

So far as France was concerned, the critical elements of her empire were North Africa, Equatorial and West Africa, Madagascar, and Indochina. Additional holdings were located in Pacific islands, Caribbean islands, and South America. Militarily, North Africa and Indochina are of primary interest for this study. The later military significance of colonial possessions in North Africa derives from France's long and difficult campaign of conquest in the early and mid nineteenth century to subdue Algeria. These campaigns introduced military concepts such as the organization of the theater and the forces into territorial commands, the requirement for large numbers of infantry for garrisoning possessions, the need for mobile forces that were self-sufficient and capable of all-around security, and a penchant for tactical defense against masses of attacking natives.² Indeed, this last point is particularly interesting as the concept that European formations should be offensive at the operational level but defensive on the tactical level so as to leverage superior firepower and unit discipline would recur in Indochina in the mid 20th century.³ The late nineteenth century campaigns in Indochina introduced the idea of using waterways as priority lines of operations, with consequent reliance on naval formations to enable mobile operations.⁴ All theaters required relatively large numbers of infantry

which could not always be obtained from the regular army in Europe. France had thus developed methods of manning that involved the Foreign Legion and the Colonial Army. This latter formation evolved from naval infantry, and its expansion and later independence forced the forming of a second naval infantry--the fusiliers marins, 5 and consisted of volunteer French soldiers along with levies raised from the empire. As empire holdings contributed greater numbers of troops, the Colonial Army grew to include semiautonomous regiments of regional forces that possessed French cadres but largely local soldiers. Examples of these forces included Algerian Rifle Regiments, Tonkinese Rifle Regiments, Zouave Regiments (composed of European colonists in North Africa), and Senegalese Rifle Regiments. This system ultimately provided the large numbers of infantry required by colonial garrisoning--and by the preferred method of counterrevolutionary warfare of territorial organization--with limited European manpower commitment and with the advantage of local area expertise inherent to using local personnel. By 1914, France had in effect two armies--the Metropolitan or regular army composed of 172 regiments upon mobilization, and the Colonial Army composed of such diverse formations as mentioned above. 6 The two armies were generally intended for separate roles--the Metropolitan to fight a major war in Europe against a peer competitor, and the Colonial Army to garrison the empire and fight small wars. However, the Metropolitan Army did provide occasional units for empire fighting, particularly elite units composed of volunteers for service in French Algeria, while the experience of the Great War would show that the Colonial Army could also reinforce the Metropolitan Army. Nonetheless, the result of the two army system was a polyglot mix of French

ground forces of varying capabilities and varying abilities to work together. This would be significant in Indochina in the midtwentieth century.

Another aspect of the preGreat War colonizing effort was the culture of those officers on the empire. In days of slow communications, French officers on the empire had much leeway to make independent decisions. Frequently naval or Colonial Army officers, they would often find themselves fighting wars and conquering new lands for France, with the proviso that if they became a liability they were on their own. However, 19th century colonizing usually reinforced success. This resulted in officers in the empire nurturing very swashbuckling approaches to military problems amongst one another. This, too, would be manifest later, particularly in Indochina.

If a "colonial school" of warfare can be claimed to have developed in France, it began with Marshal Thomas-Robert Bugeaud in Algeria in the 1840s. A veteran of the Napoleonic campaign against guerrillas in Spain, Bugeaud entered Algeria to correct the French problems in subduing the natives. Drawing on French Revolutionary Wars and Napoleonic Wars experiences in fighting guerrillas, Bugeaud had to first counter the French army's habits of using conventional Napoleonic techniques in the Saharan desert. Specifically, the French were relying on static defensive lines, large heavy columns of infantry with large baggage trains, and heavy artillery. The predictable result was light Arab cavalry raiding the rear of the French and then disappearing. Bugeaud introduced the essential elements of French colonial warfighting that would endure through 1954 in Indochina, and to 1962 in Algeria with some refinements. He added political responsibilities to the territorial commands, he lightened the equipment and baggage of all troops to increase their mobility, he reduced the heavy columns to mobile columns of

all-arms regimental size that were small enough to form square around their internal baggage trains, and he increased the area of French control with the "oil spot progression" by establishing supply base forts as he extended mobile columns. ¹¹ The forts of the territorial commands would be the sallyports for *razias* (raids) against recalcitrant enemies with the goal not of annihilation but of dispersion and resource denial. ¹² To incorporate the political and psychological dimensions of colonial warfare, Bugeaud introduced Arab Bureaus under the control of the territorial commands.

Beginning as early as 1841, these Arab Bureaus were established to provide intelligence, conduct diplomacy, conduct psychological operations, and perform civil affairs functions amongst the native populations. ¹³

Refinements to Bugeaud's colonial school were most notably made by General Joseph-Simon Gallieni in late nineteenth century Indochina and then by General Hubert Lyautey in early twentieth century Morocco. Gallieni's notable refinement was to add emphasis to the political side of colonial warfare by merging Bugeaud's Arab Bureau concept into the territorial commands at every level. These "military circles" entailed the local military commander coordinating native and French colonial administrators in all political, economic, and social arenas within his area of responsibility. ¹⁴ Lyautey's refinement was to add yet additional emphasis on the nonmilitary aspects of colonial warfare, to the point of expressing that he considered the political element to be of greater importance than the military. ¹⁵ Organizationally, he augmented Gallieni's military circle with dedicated indigenous affairs officers to serve as civil affairs staff. ¹⁶

This early twentieth century period of colonialism provides the starting point for examining this thesis's criteria for French ground force organizational development in

counterrevolutionary warfare post-World War II. The first criterion--theater organization--was already firmly entrenched. Above the regimental level, the French ground forces were organized on territorial basis and apportioned to territorial headquarters and subheadquarters as required by the needs of garrison security and provision of mobile forces for forays. By the early twentieth century, the territorial commands had assumed civil affairs and psychological operations functions as responsibilities of the local commanders with some special staff assistance. In the focus areas of Indochina and Algeria, the theater organization had been largely developed by the early twentieth century such that it would be little altered in its general outline in later conflicts. In Indochina, the military was organized into division equivalent administrative groupings in Tonkin, Annam, and Cochin-China. In Algeria, the organization was divided between headquarters in Constantine, Algiers, and Oran. These division equivalent headquarters were not field divisions capable of maneuver, but rather territorial formations that commanded various garrisons and the units within an area. They would be further developed when large-scale warfare occurred after 1945. The next criterion--infantry organization--was quite simple. Infantry was organized into battalions which typically consisted of approximately one thousand men divided into four companies each of three platoons and a two-gun machine-gun section in the headquarters. ¹⁷ The principal battalion armament was the rifle, and the battalion was organized to be able to mass rifle fire. In the small war context, this meant the battalion was able to form a square, with companies occupying either a side of the square or providing additional ranks behind a side of a square. ¹⁸ In Europe, three battalions made a regiment but in the Colonial Army--dependant upon local levies--there could be two to seven battalions per regiment. However, Colonial Army

regimental headquarters were not meant just for maneuver but also as garrison headquarters to assist the theater territorial command's duties, as well as perform the administration and training of local battalions. The fire support for these infantry battalions was provided by a relatively small number of artillery pieces. Except against native fortifications, artillery was cumbersome and not entirely necessary or useful in most nineteenth century small wars. It was often taken along in two to six gun elements for its perceived psychological impacts to terrify the locals as well as reassure the Europeans. 19 This penny packet deployment of artillery for largely psychological purposes would be seen again after World War II, but not with universal success. The importance of mobile forces was recognized for seeking out guerrilla bands. While mounted troops were profitably used, particularly in North Africa, most mobile elements were mobile due to their logistics independence rather than their intrinsic mobility. Often foot-mobile, animal transport and human porters would be integrated into the column to permit the infantry – supported by limited artillery and forming a square around the baggage train – to march into rebel areas and await a native charge. The native charge would usually result in withering casualties to the European rifle fire and then permit the mobile element to either return to garrison or establish a new garrison in the new territory. These garrisons would then form supply depots and administrative centers responsible for keeping open the lines of communication between each other so as to permit the free operation of the mobile columns. A typical mobile column would consist of several battalions with an artillery battery and baggage train, commanded by an appointed officer from an available regimental headquarters, and if convenient supported by naval forces. The final criterion--use of indigenous forces--has been largely addressed. Local personnel were incorporated into the Colonial Army either in their own formations with French cadres such as Algerian Riflemen, or permitted to join the largely volunteer French Colonial Regiments. For example, the 23rd Colonial Infantry Regiment would have been composed of largely French volunteers with a small number of personnel from the empire that the regiment recruited to fill empty spaces within its ranks. The organization of indigenous personnel was considered an essential component of the colonial effort, not just to secure manpower but to co-opt the population into being loyal to France. ²⁰ This loyalty was demonstrated by the French policy of polyvalence, in which native troops could be deployed throughout the French Empire, thus furthering the feelings of loyalty to France thanks to the troops' sense of contribution to the Empire. ²¹

The Great War Legacy

World War I, the Great War, had an influence upon ground force organizations worldwide. Some of the influences were peculiar to French colonial organization. Part of this influence was caused by the fact that the French Colonial Army was used to reinforce the Metropolitan Army; and therefore saw much combat on the Western Front and in other theaters, like Macedonia and Gallipoli. While elements of the Colonial Army had fought in Europe before, such as the Marine Division in the 1870 Franco-Prussian War, these Colonial Army units were the regiments composed largely or exclusively of European volunteers. In the Great War, Colonial Army units of North Africans, Senegalese, and even Tonkinese were shipped to Europe. This created the requirement for the Colonial Army to match the improvements in firepower and maneuverability that European formations developed by 1918. From the relatively simple organizations with concurrently simple tactics of pre1914 colonial warfare developed formations with

comparable organization and tactical abilities as first line European units. The spread of excess weapons and the demobilization of experienced troops worldwide meant that these new capabilities of the Colonial Army would be well utilized against newly capable native formations in such places as Morocco in the Rif Wars. France also greatly expanded its Colonial Army during the Great War, seeing the empire as a great resource of manpower in addition to its traditional raw materials supply. As examples of the scale of Colonial Army involvement in the Great War, consider that sixty-three battalions of Algerian Rifles served on the Western Front, and approximately 150 battalions of Senegalese Rifles were raised for both colonial garrisoning and service in the war. ²³

The Great War influenced colonial organizations in several of the criteria. For territorial headquarters in the colonies, the only minimal organizational changes occurred resulting from continued improvements in technology, such as wireless and telephones. The next criterion, infantry organization, changed the most due to the Great War. By 1918, infantry was still organized and deployed by battalions throughout the colonies, but the internal arrangement of those battalions had changed considerably. Slightly smaller than pre1914, battalions comprised three rifle companies each of a weapons platoon with small mortars and a machine-gun and three rifle platoons each composed of squads that had light machine guns, rifles, and both hand-launched and rifle-launched grenades.

There was a weapons or machine-gun company in the battalion that held six to twelve machine guns plus medium mortars and finally, a headquarters company that included some essential services in addition to the staff. There was greater communication ability (provided by the large-scale use of field wire) and consequently a larger staff. The unit operated in a more dispersed fashion and, in the case of the French, the infantry was

organizationally and doctrinally capable of conducting fire and maneuver tactics down to the platoon level.²⁴

The fire support for colonial warfare was now largely composed of batteries of the famous 75-millimeter canons. Not only were they capable of animal draw, but also some batteries were motorized. While total artillery allotment was typically as pre1914, the French artillery park was capable of providing greater fire and in larger calibers upon demand, as shown in the Rif Wars in Morocco in the 1920s. In addition to occasional naval gunfire support, the Great War also introduced airpower as a form of fire support. In the aftermath of the Great War, the French and British both experimented with colonial airpower for the purposes of patrolling and bombing or strafing outlying rebel bands. However, actual close air support was a concept in its infancy prior to World War II, and beyond observation and limited interdiction airpower did not yet provide the sort of firepower envisioned by some of its advocates. ²⁵

Mobile forces for counterrevolutionary warfare were also affected by the Great War. Motorization and mechanization had been introduced in a large way by 1918, but without necessarily positive results for colonial campaigning. These units were technologically limited at the time, and they introduced a significant maintenance and fuel burden. Road networks remained limited, as did the cross-country mobility of the machines. The result was limited motorization introduced to mobile forces in the colonies. An example was the armored car company used along some Colonial Routes in Indochina, or similar truck formations in North Africa. However, limitations of equipment and the challenges of logistics and the terrain meant that animal-mounted

mobile forces remained paramount in the colonies and that animal baggage trains remained necessary for mobile force sustainment.

The last criterion, use of indigenous personnel, changed least as a result of the Great War. The huge numbers of personnel mobilized to participate in France's defense in the Great War were demobilized, and the number of battalions in the Colonial Army prior to World War II was approximately the same as prior to 1914.

French Ground Forces in Algeria, 1939-1945

French ground forces in Algeria and Indochina during World War II roughly followed the above precedents. Both theaters followed the standard territorial organization as had been previously developed, and both theaters attempted to continue the French Empire regardless of the larger global events. Nonetheless, both theaters saw change as a direct result of World War II.

French forces in Algeria were a component of the Army of Africa which was the army equivalent headquarters for French forces in North Africa. Algeria was administered by a Corps equivalent headquarters called the 19th Military Region, and was initially comprised of the Constantine, Algiers, and Oran Divisions. These territorial organizations were primarily administrative rather than field formations and they controlled a total of forty-four infantry battalions, six battalion-sized cavalry regiments, and twelve field artillery battalions. The infantry was primarily composed of Algerian Rifles, but Foreign Legion, Zouaves, and Senegalese were also present. After the Allied invasion of North Africa and subsequent joining of the Allies by the Army of Africa, the 19th Military Region formed the 19th Corps Headquarters that controlled four field divisions as part of the Allied effort to defeat the Axis in Tunisia. These divisions (the

Algerian March, Constantine March, Moroccan March, and Oran March) were hastily organized task groupings of available garrison forces. Each division had a three-battalion infantry regiment and two cavalry regiments, but they were light in artillery; typically fielding three battalions of motorized 75-millimeter cannons while most modern armies had increased to 105-millimeter howitzers in their direct support artillery. As march divisions the internal makeup of the field forces constantly changed, but nonetheless the French were able to hold a corps sector of the Allied front in the Tunisian campaign despite polyglot forces, hasty organization, and outdated equipment. ²⁶

After the victory in Tunisia, the Army of Africa--united with a division's worth of Free French troops--formed the basis for a new French Army to fight with the Allies. The old French equipped and organized Army of Africa was fused with the British equipped and organized Free French and totally reorganized and reequipped along American lines. Minor French organization traits were kept, but they were modifications to American organizations, such as making a reconnaissance battalion organic to infantry divisions, rather than having divisional companies and higher headquarters pools of battalions. Traditional French historic designations were maintained, and the French also managed to economize on personnel and equipment to form some additional units such as irregular Moroccan light infantry and Commando and Special Air Service battalions organized along British lines. A corps was deployed from Africa to Italy, and thence to southern France where it was expanded to a field army with the incorporation of metropolitan personnel, such as units of *maquis*, units of the Vichy army, and newly mobilized personnel. Most new units were again organized and equipped along American lines, but some units additional to that provided by the American aid program were formed with

whatever equipment could be found and with varying adherence to the American-inspired tables of organization.²⁷

In the various criteria, the above developments in North Africa and Europe primarily impacted infantry organization, organization for fire support, and organization of mobile forces. As American Army doctrine, equipment, and organization was utilized, American influence of these three criteria was marked. Infantry was organized in a manner somewhat reminiscent of pre1940 French patterns, but with the introduction of new equipment, such as recoilless rifles and portable radios. Greater motorization was also introduced and animal baggage was eliminated in all but special mountain formations. The reduction in animal transport in favor of motorization also impacted mobile forces available for colonial contingencies, as cavalry became motorized and new armor units were introduced. The artillery was almost completely motorized, so that with most of the army on wheels instead of feet and hooves the logistics sustainability and the cross-country mobility of the French Army were significantly changed. However, the artillery was more powerful being composed of American howitzers and fire control equipment. Airpower in the form of significant numbers of piston engine fighter bombers was now operationally significant, and they were capable of close air support as a result of lessons learned in World War II.

French Ground Forces in Indochina, 1939-1945

The French ground forces in Indochina maintained their prewar organizational structure up until March 1945, despite the fall of France in 1940 and the subsequent Japanese occupation. The Japanese occupied Indochina with a small corps-sized element and used Indochina more as a base of operations than as an area to occupy. They

therefore permitted the French colonial administration to continue to largely run the country. In March 1945, the Japanese brutally destroyed the French military in Indochina--killing, imprisoning, or chasing away to internment in China the entire force and therefore leaving a vacuum of French military presence in Indochina until late 1945. This vacuum, combined with the American support of the Viet Minh as a counter-Japanese resistance and pilot escape and evasion support network, permitted the temporary establishment of a Viet Minh government in Indochina after the Japanese surrender and before the full return of the French. This created the conditions for the reconquest of Indochina described below.

The French military in Indochina was organized as a corps equivalent force with three territorial divisions in Tonkin, Annam, and Cochin-China. These three divisions contained fifty infantry battalions (Foreign Legion, Colonial Infantry, and Tonkinese Rifle Regiments as well as a few unique local battalions), three armored car companysized units, and seven field artillery battalion equivalents. As local rebellions had been largely small and ineffective, this force was focused mostly on riot control and defense against China, bandits, and Thailand (with whom the French fought a brief war along the Thai-Cambodian border in 1941). The large number of infantry battalions is misleading, though, because very few of their personnel were European and only some of the Tonkinese units were trained and equipped to French regular standards. The Japanese therefore did not have much difficulty disarming this army except for a few Colonial Infantry and Foreign Legion units which fought desperately.

Organization to Return to the Far East

French planning for a return to the Far East encompassed several factors. For one, the defeat of France in 1940 made resources relatively scarce compared to the relative advantage over native forces the French had usually possessed in colonial campaigning. Next, the presence of an intact army in Indochina provided a large reservoir of professional and acclimated troops; albeit with a large political taint of collaboration which many of the Free French felt implied the army in Indochina could not be trusted. Regardless, the rapid pace of global military improvements during World War II meant that the French forces in Indochina became gradually more obsolete. The Japanese disarmament of this French force in Indochina in March 1945 was principally due to Japanese awareness that subversive French elements were conspiring between the existing French presence in Indochina and France proper for a return of French rule. The final issue for France was that they were a very junior partner in the World War II alliance and were dependant upon their allies for strategic shipping, equipment, and incorporation into strategic planning. This meant that the French had to couch requests for support in returning to Indochina in terms of the overall war effort against Japan. As the United States did not officially support French return to colonial rule in Indochina, this led to greater French cooperation with the British headquarters in India as well as an emphasis on covert operations.

French planning and preparations thus took two parallel tracks. First, as early as 1943 the French began organizing a special force to return to Indochina which would either work with *in situ* forces to evict the Japanese, or merely reoccupy Indochina upon Japanese evacuation. The force for this operation included covert operators who joined

the shadowy Force 136--a British Special Operations Executive organization that was based in India and conducted unconventional warfare in the south-east Asia area. These were the personnel who were infiltrating Indochina in 1944-1945 to contact *in situ* forces and to organize *maquis*; they were probably also the reason the Japanese determined the *in situ* forces were a threat and therefore wiped them out. Details on the size and organization of the French elements of Force 136 are hard to find, as their operations were especially secret not only from the Japanese--but from the Americans. As their operations had not been ratified by the Combined Chiefs of Staffs and were contrary to American policy, French covert efforts were especially sensitive. This also led to the situation where American covert operators were assisting the organization and equipping of the Viet Minh--an obviously anti-French outfit--while other pro-French elements were being organized by Force 136. However, it is known that the French intelligence services provided the personnel for Force 136, and they parachuted several teams akin to the Jedburghs of the European theater between December 1944 and January 1945.

Another element of this first French track was the Light Intervention Corps, later renamed the 5th Colonial Infantry Regiment. This unit was raised in North Africa and then staged in India, and was the first French unit to return to Indochina when the British transported them to Saigon. It was a unique unit organized with five subelements: two parachute infantry companies organized similarly to American organizations of the time, two light commandos organized similarly to British Commando Troops of the time, and a Special Air Service Battalion organized like a similar British unit of the time. This last unit, composed of naval infantrymen who had been given parachute and commando training, underwent several name changes and is most frequently known as Commando

Ponchardier since there was a desire to not be confused with a parachute unit later deployed to Indochina--the 1st Special Air Service Parachute Shock Battalion. At any rate, the 5th Colonial Infantry Regiment was employed as the advance guard of the French Far East Expeditionary Corps in its reoccupation of Indochina.³⁰

The second track in French plans was the French Far East Expeditionary Corps. The French Far East Expeditionary Corps was designed to fight a conventional battle against the Japanese Army, but under one of two scenarios: either as part of a reconquest of Indochina or, to placate American desires, as part of a follow-on wave of assault troops in the upcoming invasion of Japan's home islands. The early fall of Japan obviated the need to invade Japan, but it also meant that American logistical and transportation support was lost. This corps was at first organized with two Colonial Far East Infantry Divisions composed of Senegalese soldiers, but upon more detailed consideration the French Far East Expeditionary Corps was comprised of the 3d and 9th Colonial Infantry Divisions with mostly European soldiers, the 2d Armored Division, the Far East Brigade composed of colonial troops in Madagascar, and the Far East Marine Brigade which had two infantry battalions, an armored battalion, and an artillery battalion and was intended as the amphibious assault element of the corps. Mostly organized and equipped along American lines, this was a powerful conventional force that could assault and fight Japanese divisions in the vicinity of Saigon, Hanoi, or the Japanese home islands.³¹ The troops in these units were by now largely combat veterans of numerous campaigns, and they had a desire to avenge French humiliations from 1940 to 1945. With the early end of World War II in the Pacific, these troops found themselves scurrying to reconquer

Indochina but without the transportation and logistics support expected from America, with a vastly different enemy than had been anticipated.

Reoccupation of Indochina

The early September 1945 surrender of Japan caught the French off guard and unprepared. The Viet Minh under Ho Chi Minh were able to establish a semblance of government in Hanoi and Saigon in the face of an indifferent Japanese occupation force awaiting repatriation and absent any French presence. By the end of September, this unrecognized government was being displaced by Chinese and British forces which were mandated to disarm and repatriate the Japanese and free allied prisoners. In the northern part of Indochina, a Chinese field army of tens of thousands of soldiers occupied and conducted the disarmament of the Japanese. They also took the opportunity to loot what they could, and their undisciplined and ineffective forces did not attempt to combat the Viet Minh, rather abiding a live and let live agreement while they tried to extend their presence as long as possible. In the south, the British deployed an Indian infantry division to execute their mandate. They also provided transportation assistance to the French, who deployed elements of its 5th Colonial Infantry Regiment in early October 1945. Other units of the French Far East Expeditionary Corps followed as quickly as British and French transportation allowed, and by early 1946 the British had departed and left Indochina to the French. The Chinese lasted longer, until mid-1945 after negotiations between the French, Chinese, and Ho Chi Minh's forces combined with the deployment of the 9th Colonial Infantry Division permitted reestablishment of French rule in the northern population centers.

This period of September 1945 to December 1946--when the Indochina War finally broke out between the French and the Viet Minh--is a remarkable period in its own right. Japanese forces remained under arms to assist British occupation in Saigon and also provided resources to the Viet Minh before going home. The Chinese looted, and the French found that their French Far East Expeditionary Corps was not organizationally suited for the chaotic situation in Indochina--particularly given that the reoccupation was not conducted with in situ forces except for some released prisoners who formed a couple of small battalions and provided important help in the initial French reoccupation, and that the enemy was not the Japanese Army, but rather the Viet Minh revolutionary movement which had briefly established government over the important population centers. The French were thus forced to reoccupy the entire nation--or at least the significant parts of the nation--while brushing aside Viet Minh resistance. There was also some degree of animosity between Frenchmen in Indochina and those coming to reoccupy Indochina. This animosity was largely due to the perception that those in Indochina had collaborated, while the counterargument was that the situation was hopeless so far as active resistance was concerned so all that could be done was to preserve the empire as best as possible. 32 Nonetheless, by December 1946 the French had succeeded in reestablishing colonial rule over the population centers and principal economic areas and lines of communication. They managed to accomplish this on a shoe string due mainly to the afore mentioned swashbuckling leadership throughout the French Far East Expeditionary Corps as well as the fact that the Viet Minh were still under developed and unprepared to militarily confront the French Far East Expeditionary Corps.

From the aspect of organizational development, the mutation of the French Far East Expeditionary Corps is particularly interesting in that a conventional battle corps transformed into the typical territorial organization that had characterized previous colonial campaigning. Indeed, the French Far East Expeditionary Corps was disbanded in December 1946 and its assets used to create the headquarters of the Far East Ground Forces, the territorial command for Indochina. ³³ The original French Far East Expeditionary Corps also had three division headquarters, which became the basis for the reestablished Cochin-China, Tonkin, and Annam territorial headquarters.³⁴ As the division and corps organizations were disbanded to form territorial headquarters, the need for more infantry and less of the conventional overhead inherent to the original French Far East Expeditionary Corps became apparent. The French resorted to dismounting some of the armor and cavalry units while dispersing the rest in company-sized increments. They dispersed their artillery, too, into smaller packages of batteries and even platoons to cover as much ground as possible--a return to the use of artillery for psychological purposes since the Viet Minh of 1946 were no match for the French Far East Expeditionary Corps maneuver units. The French used several expedients to increase their infantry strength, such as forming freed prisoners into battalions (an admittedly short-term solution since these men had to be shipped back to France in early 1946 for health and morale purposes) and by using naval landing parties from nearby ships. Lastly, the pleas of the French Far East Expeditionary Corps back to France resulted in the dispatch of additional ground troops to include the first parachute battalion in early 1946 as well as several regiments of the Foreign Legion. This need for infantry can best be illustrated in the following comparison: in 1941, with little to no Viet Minh activity, the

French had an army composed of about fifty battalions of infantry deployed to Indochina-many of which were manned by local troops. In the original 1945 French Far East Expeditionary Corps, there were only twenty-six infantry battalions. The French Far East Expeditionary Corps did have much more powerful artillery as well as seven battalions of armor and cavalry in its original organization, but terrain, logistic support limitations, and the nature of the enemy in 1946 meant that infantry was what was needed. The French Far East Expeditionary Corps needed to reorganize on the spot for its unanticipated mission, and its success in operations can be partly attributed to its ability to flexibly reorganize.

The territorial organization has already been mentioned. The original French Far East Expeditionary Corps was a standard battle corps with subordinate divisions and corps troops. It became the nucleus of the territorial headquarters for Indochina and it formed territorial divisions for Tonkin, Annam, and Cochin-China similar to what had existed previously. The Indochina command was then able to merely swap subunits, typically battalions, between the territorial divisions to meet the needs for security or offensive operations. This territorial organization would grow during the war to reflect the increase of the territorial divisions to territorial corps and consequently the corps equivalent in Indochina would eventually grow to army size. Another aspect of territorial organization is that regimental headquarters also became responsible for subdivisions of the territory, so that battalions became the maneuver unit by the end of 1946.

The organizational development of the infantry during the reconquest is of two concerns--the internal organization of the infantry and the status of infantry within the French force as a whole. From an original force of twenty-six battalions in the original

French Far East Expeditionary Corps, infantry grew to approximately fifty battalion equivalents including noninfantry units operating on foot by late 1946. This strength coincides with the 1941 infantry allotment to Indochina. The official internal organization of these battalions was largely along the contemporary American lines. However, two considerations make this generalization slightly inaccurate. One, the equipment holdings of the French in Indochina were quit mixed and included American, Japanese, British, and old French weapons. Thus, any one infantry unit would have to slightly reorganize based on certain equipment differences. Secondly, the nature of the enemy and of the terrain put a premium on lightness. The Viet Minh of the time were lightly armed, and there was ample support from artillery, naval gunfire, and armor should firepower be needed, so most units neglected to bring their heavy weapons to the field. This resulted in the beginnings of a later official reorganization that would eliminate the infantry battalion's heavy weapons company in favor of a fourth rifle company while simultaneously reducing the heavy weapons within those rifle companies for an overall reduction in infantry battalion firepower in favor of light infantry strength.

Fire support was provided by the above-mentioned artillery as well as a small number of fighter-bomber squadrons. Within range of water there was also the possibility of naval gunfire support to include from a battleship and heavy cruisers. However, the need for fire support was limited to random incidents near ports--which could be handled by naval gunfire-so the artillery was dispersed to cover as many infantry patrols as possible for psychological support. This was a trend which would be accelerated once the Indochina War began in earnest, albeit for different reasons.

PreWorld War II French mobile forces in Indochina had consisted of infantry with human and animal baggage trains for logistics self-sufficiency. The French Far East Expeditionary Corps deployed with motorized and mechanized forces that were deemed inappropriate to the theater and they were therefore used sparingly in the delta regions close to the major cities. Remaining motorized and mechanized units were dispersed for patrolling along the lines of communication. However, mobile forces were critical to the reestablishment of French rule over the population centers of Indochina, and this was accomplished with flying columns of infantry supported by motorized, foot, airborne, or riverine mobility. As the Viet Minh was yet immature, the threat to lines of communications was relatively small so many mounted units performed duties as dismounted infantry. The most important innovation in mobile forces was the transformation of the Far East Marine Brigade into a riverine force of amphibious landing craft modified with armor and armament into riverine craft which could deploy organic or other French Far East Expeditionary Corps infantry along the waterways which were the primary communication lines for most of the population centers. As the Marine Brigade transformed, it eventually reorganized into a dedicated riverine force called the Amphibious Force. Its previous organization of two infantry battalions, an armor battalion, and an artillery battalion changed to two river flotillas, one for the Mekong Delta and one for the Tonkin Delta, each of multiple amphibious craft manned by marines as well as a naval commando. This last was the remnant of the previous marine maneuver forces and indicates the manpower devoted to manning the guns of the riverine craft. 35 Equipment in late 1946 included about 110 small amphibious craft as well as fourteen small amphibious ships suitable for river navigation. 36 The other introduction to

Indochina in the reconquest was the use of paratroopers. The 5th Colonial Infantry
Regiment possessed and used paratroops, and the Half-Brigade of Special Air Service
Paratroopers was deployed in 1946. These troops were often used in company-sized raids
to reestablish French authority at outlying areas or to reinforce tiny posts under attack.
These Special Air Service paratroopers operated as conventional airborne infantry, unlike
the British Special Air Service during World War II. Thus, the armed and armored jeeps
of the battalions were relegated to security units while the Special Air Service
paratroopers largely operated on foot. However, one benefit to their Special Air Service
origins was that, organized as twelve-man sticks they could be deployed in small
packages which was appropriate to the small scale of operations initially as well as the
limited air transport available. The Special Air Service pattern of organization was found
to be inappropriate and later the parachute units would be organized along light infantry
patterns, but the stick organization would be retained.³⁷

The final criterion of this study--use of indigenous troops--is limited during the reconquest of Indochina. Forces deployed were from France and consisted of largely European personnel. Some Moroccan units were deployed in 1946--presaging the later large deployment of African troops to Indochina--as were Foreign Legion units. Indigenous troops were mostly recalled Tonkinese Riflemen who, due to a great deal of suspicion on the part of the French, were relegated to porter and other manual labor duties during this timeframe. Thought of using indigenous personnel to provide for the infantry shortfalls would not occur until two years later.

¹Colonel C. E. Callwell, *Small Wars*, *Their Principles and Practice* (Nebraska: University of Nebraska Press, 1996), 133.

²Ibid., 129.

³Ibid., 85.

⁴Lieutenant Colonel Victor Croizat, *Vietnam River Warfare*, 1945-1975 (New York, NY: Blandford Press, 1986), 25.

⁵Yves DeBay, *Troupes De Marine* (Paris: Histoire et Collections, 1996), 8.

⁶John Mosier, *The Myth of the Great War: How the Germans Won the Battles and How the Americans Saved the Allies* (New York, NY: HarperCollins Publishers, 2001), 19.

⁷Charles W. Koburger Jr., *Naval Strategy East of Suez* (Westport, CT: Praeger, 1992), xiii.

⁸Charles W. Koburger Jr., *The French Navy in Indochina: Riverine and Coastal Forces, 1945-54* (Westport, CT: Praeger, 1991), 3-6; and Douglas Porch, "Bugeaud, Gallieni, Lyautey: The Development of French Colonial Warfare," in *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986), 385, uses the term "buccaneering" to describe nineteenth Century colonial officers.

⁹Douglas Porch, "Bugeaud, Gallieni, Lyautey: The Development of French Colonial Warfare," 378.

¹⁰Michel L. Martin, "From Algiers to N'Djumena: France's Adaption to Lowintensity Wars, 1830-1987," in *Armies in Low Intensity Conflict*, ed. David Charters and Maurice Tugwell (New York, NY: Brassey's Defense Publishers, 1989), 81-82.

¹¹Ibid., 82-83, 85.

¹²Douglas Porch, "Bugeaud, Gallieni, Lyautey: The Development of French Colonial Warfare," 380.

¹³Michel L. Martin, "From Algiers to N'Djumena: France's Adaption to Lowintensity Wars, 1830-1987," 88.

¹⁴Ibid., 89-90.

¹⁵Ibid., 87.

¹⁶Ibid., 97.

¹⁷John A. English and Bruce I. Gudmundsson, *On Infantry*, rev. ed. (Westport, CT: Praeger, 1994), 8-10.

¹⁸Callwell, Small Wars, 256.

¹⁹Ibid., 429-439.

²⁰Ibid., 91-92.

²¹Ibid., 94-96.

²²Martin Windrow, *French Foreign Legion, 1914-1945* (London, UK: Osprey, 1999), 9-17.

²³John Ellis and Michael Cox, *The World War I Databook: The Essential Facts and Figures for All the Combatants* (London, UK: Aurum Press Ltd., 1993), 147-148.

²⁴English and Gudmundsson, *On Infantry*, 28-29.

²⁵Dr. James S. Corum, "American Copy of British Colonial Air Control Attempts?" [Article On-line]; available from http://www.geocities.com/equipmentshop/colonialairpower.htm; Internet.

²⁶Nafziger, French Order of Battle in World War II 1939-1941, 79-80, 82-86.

²⁷Ibid., 87-108.

²⁸Ibid., 81. Army High Command, "The French Army" (US Army Intelligence translation of [German] Foreign Armies West report of 20 June 1942), page 95, claims only 39 infantry battalions in Indochina; however, the Germans appear to have not counted battalions composed largely of indigenous personnel resulting in the discrepancy. Nafziger reproduces another German report which listed all French battalions, including those composed largely of indigenous personnel, and the count of all infantry battalions equals 50.

²⁹Pissardy, Commandos Nord-Vietnam, 1951-1954, 13.

³⁰Ibid., 14.

³¹Koburger, *Naval Expeditions: The French Return to Indochina, 1945-1946*, 11; and Command and General Staff College, "The French Far East Marine Brigade," *Military Review* 37, 7 (October 1947): 111, states that the armor in the Marine Brigade's armor battalion was never deployed and the troops used as infantry.

³²Koburger, *The French Navy in Indochina: Riverine and Coastal Forces, 1945-54,* 3-4.

³³Koburger, Naval Expeditions: The French Return to Indochina, 1945-1946, 79.

³⁴Erwan Bergot, *Gendarmes au Combat, Indochine 1945-1955* (Paris: Presses de la Cite, 1987), 285, indicates that the Annam headquarters was also formed by the Far East Brigade, while the 3d Colonial Infantry Division cadred the Cochin-China headquarters and the 9th Colonial Infantry Division cadred the Tonkin headquarters.

³⁵Contreamiral C. R. Estival, "Le Concept de Dinassaut de la guerre d'Indochine a la guerre du Viet-Nam," Revue Historique Des Armees 3 (1993): 111-120.

³⁶Colonel Victor Croizzat, trans., *A Translation from the French: Lessons of the War in Indochina*, vol. 2 (Santa Monica, CA: RAND Corporation, 1967), 348, and Command and General Staff College, "The French Far East Marine Brigade," 111.

³⁷Croizzat, trans., A Translation from the French: Lessons of the War in Indochina, vol. 2, 258.

CHAPTER 3

ORGANIZATIONAL DEVELOPMENT DURING THE WAR IN INDOCHINA

There is a continuing need to modify the tactics and techniques of combat, as well as the organization of units, in accordance with the dictates of existing circumstances. This was repeatedly emphasized during our operations in Indochina where our units, organized for warfare in Europe, proved to be ill-suited to the task of carrying on a struggle against rebel forces in an Asiatic theater of operations. ¹

French Lessons Learned Report of the War in Indochina

The crucible in which French colonial counterrevolutionary organizational concepts were adapted to modern warfare was the war in Indochina. Colonial concepts were refined in Indochina, and while the effort was ultimately unsuccessful, lessons applicable to the later war in Algeria were derived and then successfully applied. The nature of the war in Indochina was of a countrywide guerrilla war with a later developed regular opponent trained and supplied by Communist China. This presented numerous challenges to France, so an examination of the course of the war is required to understand the operational environment. Organizational development can then be evaluated by examining this thesis's focus areas of territorial organization, infantry organization, mobile force organization, organization for fire support, and use of indigenous personnel.

The War in Indochina

The 1946-1954 Indochina War developed from a postwar colonial conflict into a full war with global interest. An interesting facet of the development of the war is the fact that it was fought in an annual cycle that nested with the October through April campaign season of north Vietnam--the primary area of operations for both the French and the Viet

Minh.² This chapter will briefly examine the development of the war and then examine French organizational development in the selected criteria of this thesis.

The Indochina war is generally considered to have begun in December 1946 with the open conflict in Hanoi between the French and Viet Minh. This marked the end of the French reconquest and also the end of early negotiations. The French forces quickly evicted the Viet Minh from Hanoi and the surrounding Tonkin Delta area during the remainder of the 1946-47 campaign season, and the Viet Minh were forced to retreat into isolated mountain areas between the Tonkin delta and Chinese border. In this isolated area--known as the Viet Bac--the Viet Minh would establish elaborate base areas, from which they could avoid the French army, build the nucleus of a main force regular army, loosely control guerrillas throughout Indochina, and serve as a rebellion in being.

The outbreak of war forced the French to consolidate their spread-out forces as well as seek reinforcements. By March 1947 the French had sixty-nine infantry battalions spread between the territorial commands.³ The French, better equipped and trained at this stage of the war than their opponents, nonetheless were forced to withdraw from much of the countryside to consolidate its small army and this therefore forfeited ground to the Viet Minh insurgency. This competition between spreading forces out to provide security against small insurgent elements and to provide area control for the government, versus the need to concentrate forces for semiconventional battles against the Viet Minh main forces, would bedevil the French the whole war.

The 1947-1948 campaign season nearly resulted in a French victory against the Viet Minh and could have won the war, but French resources were ultimately insufficient for such a monumental task. In Operation Lea, the French launched mobile forces that

included ground, riverine, and airborne elements into the Viet Minh mountain base areas north of the Tonkin delta. Destruction of the Viet Minh command was nearly accomplished, but despite the defeat inflicted on the Viet Minh the fact that the core leadership escaped meant that long-term results of the offensive were minimal. The French had poor operations security throughout the war, they had insufficient air transport to simultaneously land the entire airborne force, and they had insufficient mobile troops to cordon, search, and deny the Viet Minh the base areas. The French therefore had to withdraw back into their base areas of the Tonkin delta and to dissipate their mobile forces back into local counterguerrilla sweeps throughout Indochina. The Viet Minh reoccupied their base area and the end result was virtually no change in the situation.

The 1948-1949 campaign season was a period of consolidation for both sides. While the Viet Minh reestablished their base areas, trained additional main force elements, and continued their guerrilla tactics throughout Indochina, the French formalized many of the techniques that had been heretofore successful. Additional airborne troops were deployed to theater--all organized along light infantry rather than Special Air Service lines--and even the Foreign Legion was tapped to provide airborne formations. Additional naval assault divisions--*Dinassaut* in the French contraction--were formed in the rivers from the previous Amphibious Forces. Infantry units assigned static duties were lightened and put to work building rudimentary watch tower fortifications along lines of communication as well as continuing local sweeps. The French also initiated the development of local national governments within the French Union though

this process began slowly and did not result in any significant military forces until years later.

The 1949-1950 campaign season marked a significant turning point in the war. The victory of the communists in the Chinese civil war meant that the main force regular army the Viet Minh had been building was now reinforced with equipment, doctrine, limited sanctuary, and training from the Chinese. This would change the character of the war from a small scale guerrilla war into a semiconventional war. The significance of this is two fold: one, the French had to this point optimized their organization to fight a guerrilla war, and second, the guerrilla war continued as a supporting effort to the Viet Minh main force so French efforts to combat guerrillas had to continue. For the French, the communist victory in China, as well as the mid-1950 opening of war in Korea, meant that American aid began to flow into the French Union effort. The combination of residual World War II American military aid plus the new military aid provided under the guise of North Atlantic Treaty Organization (NATO) support or now directly to Indochina meant that the majority of French military equipment was of American origin.⁴ The organizational significance of American aid was that French organizational designs were made partially in deference to the capabilities of American material that equipped the French formations. In other words, receiving American equipment reinforced the World War II use of American organizational concepts in the French Army. For example, the Americans would provide the equipment for a certain type of unit, which implied that to use this equipment one would have to organize the gaining unit similarly to the American model. While the French would alter organizations from the American model, the base organization from which the derivation would come would be similar to an

American organization. An example is light artillery battalions, which were on paper organized by the French almost identically to the contemporary American light artillery battalion.⁵

The results of the Chinese equipping and training of the Viet Minh main force were seen in the 1950-1951 campaign season. The Viet Minh attacked in division formations the line of French outposts along the Chinese border. These outposts, along the Colonial Route 4, gradually withdrew to the Tonkin Delta but not before the destruction of several battalions and the loss of much equipment. This Viet Minh victory shocked the French, and provided greater routes to benefactors in China. Indeed, the French never regained Colonial Route 4. For the French, the reaction to the defeats along the Chinese border was to deploy General Jean-Pierre de Lattre de Tassigny. General de Lattre provided inspired leadership to the French forces and managed to resoundingly defeat the ambitious Viet Minh attempts to attack the Tonkin Delta. General de Lattre regrouped his forces around the Tonkin Delta in a series of fortifications inevitably known as the "de Latrre Line," organized mobile forces into mobile groups of motorized combined arms formation of regimental size, and employed artillery and air support to defeat exposed Viet Minh. General de Lattre also emphasized utilization of indigenous personnel in both French and nascent French Union armies. By the end of the campaign season, the French could realistically consider the prospect of future offensive actions.

Both the 1951-1952 and the 1952-1953 campaign seasons followed similar patterns. The French would conduct offensive operations into Viet Minh areas with airborne, riverine, and mobile group formations; achieve initial apparent success and then find themselves not resourced to either further pursue escaped Viet Minh forces or to

hold terrain gained. The French would then gradually withdraw back into their base areas, typically in the Tonkin Delta, while the Viet Minh would have conducted offensives in areas behind the French mobile forces resulting in both French losses and the need to parcel mobile forces out to contain the Viet Minh activities. The result was always the dissipation of French mobile offensive power. The death of General de Lattre left the Americans who were financing the war impatient for a French leader with an offensive scheme to achieve victory. The appointment of General Henri Navarre seemed to provide both the man and the plan.

General Navarre entered the 1953-1954 campaign season with an unwritten but generally understood plan known as the Navarre Plan to conclude the war in Indochina. Limited offensives in the 1953-1954 campaign season would be followed by a major offensive to defeat the Viet Minh main forces in the following year, with mopping up operations to theoretically conclude the conflict in the 1955-1956 campaign season. Forces to accomplish this scheme included enlarged armies of the Associated States (as the French Union nations in Indochina were called), the consolidation of mobile forces into a battle corps of five divisions to combat the Viet Minh main force, and the use of light infantry and indigenous militias to combat Viet Minh local guerrillas. The 1953-1954 campaign season thus began a series of limited offensives, albeit largely in reaction to Viet Minh offensives rather than as shaping operations for the following year's projected decisive operation. The French deployed mobile forces to Laos and Dien Bien Phu in reaction to the Viet Minh offensive against Laos, conducted a large but fruitless operation on the Annamese coast, and retained significant mobile forces within the Tonkin Delta to combat infiltrated Viet Minh forces.⁶ The Viet Minh recognized the

vulnerability of the French position at Dien Bien Phu and, in a near-run operation, defeated the French and won the departure of France in the 1954 Geneva negotiations.

Theater Territorial Organization

French ground forces continued their colonial and post-1945 territorial organization scheme for the war in Indochina. The model the French created in Indochina would later be expanded upon in the Algerian War. However, the roots of the system were planted in the previous century's colonial conflicts. The significant differences for the war in Indochina dealt with the scale of territorial commands, their use of fortifications, and the fact that they drained resources from and added complexities to mobile units. Also, the destruction of the previous French colonial administration, and then the later attempt to create native governments, saddled French territorial commanders with civil affairs, psychological operations, and intelligence gathering duties along the traditional military circle guise of Gallieni some sixty years previous.

Throughout the campaign the military territorial organization was based upon the geographic divisions of Indochina. The <u>Territory</u> corresponded to one of the large natural regions of the country; its commander exercised command over assigned ground force units and, in addition, had available air force and river force units in support. The <u>Zones</u> were subdivisions of the <u>Territory</u> and were in turn formed of <u>Sectors</u>. These last were further divided into <u>Subsectors</u> which generally reflected the combat capabilities of a reinforced infantry battalion.

The major concern of each command echelon was the constitution of reserves to carry out the more important operations. The only problem was to decide what the proportion between mobile forces and fixed forces was to be. . . .

It also must be pointed out that as both sides increased their capabilities and the Viet Minh undertook major operations, we in turn had to create Operational Commands of ever increasing magnitude. The juxtaposition or superimposition of these Operational Commands on the existing Territorial Commands was not always conducive to the orderly conduct of the pacification.⁷

The territorial commands of the Indochina War changed little, except in the strength of their constituent forces, from 1947 until after the signing of the Geneva

agreements. The three territories--Tonkin, Annam, and Cochin-China--mirrored the pre1945 territorial Divisions. The Tonkin command, later called the North Vietnam Command after the establishment of a nascent Vietnamese government within the French Union, was also responsible for military activity in Laos, and the command in Cochin-China, later call the South Vietnam Command, was also responsible for military activities in Cambodia. These commands were quickly reestablished in 1946 by the Expeditionary Corps with the three division headquarters, the 2nd Armored, 3d and 9th Colonial Infantry Divisions, and the Far East Brigade headquarters used as cadres. There was thus a return to the structure whereby the theater headquarters was a corps equivalent formation with subordinate division equivalent territory headquarters. The increase in numbers of formations controlled, particularly after significant mobilization of indigenous personnel into French Army and Associated States units, as well as the increase in combat relative to Viet Minh main force capabilities, led to an increase of scale of these territorial headquarters. After General de Lattre's reforms, the Indochina theater was a field army equivalent headquarters with corps equivalent headquarters for the territories. The next subdivision, the zone, became the new division equivalent headquarters; the sector was thus upgraded to regimental equivalent and the subsector to battalion equivalent. These norms could be modified; that is, relatively pacified areas might have a battalion as a sector force with companies as subsector forces, or multiple battalions could serve in a subsector. Nonetheless, the scale of territorial commands remained largely unchanged after 1951 and generally followed the above model. This issue of scale is significant; because the ramification was that the battalion was the largest permanent unit organization. Most contemporary armies, to include the French Army in

Europe, had field divisions such as infantry divisions and armored divisions with permanent unit organizations. In contrast to a fixed maneuver field division, a territorial division is like a balloon that can be filled or emptied with resources as the higher command deems appropriate. The advantage to territorial divisions is that headquarters have generally unmoving geographical boundaries and can coordinate with nonmilitary agencies involved in counterinsurgency operations—indeed their boundaries often mirror political boundaries. Another advantage is that, being static, supplies and life support assets can be placed in long-term garrisons; thus freeing manpower from logistics units for infantry battalions compared to a mobile force that will bring its logistics with it needed or not. The disadvantages to territorial divisions are relative to the effort of mobile units to combat larger enemy units such as, in Indochina, the Viet Minh main force units.

Stealing a concept from General Bugeaud's oil spot progression of small forts in the nineteenth century, the French use of fortifications impacted the amount of resources devoted to territorial commands, as the fortifications were used not only to facilitate pacification and security but also became the primary component of an additional mission. The French began using squad-sized watchtowers, frequently manned with indigenous auxiliaries, along lines of communication by 1948. These permitted an economy of force and were used in some pacified areas until the end of the war. However, they were by their nature spread out from one another--typically one kilometer apart--and not capable of withstanding platoon or larger-sized attacks from an enemy with modern weapons. In such contested areas, or in isolated locations, the French developed the "South Vietnam" type fortification. These triangular, *Beau Geste* type

forts were semipermanent bases for platoon to company-sized elements. Capable of providing security against rural guerrillas, they could not defend themselves against a semiconventional Viet Minh main force attack, and they were therefore not retained in northern Vietnam. Despite their inability to protect against semiconventional attack and their cumulative manpower drain, the "South Vietnam" fortifications were retained in some areas of Indochina. The final types of fortifications were the "Tonkin" types. 10 The several hundred such fortifications of this classification constituted the de Lattre Line. Modernized with any available concrete, these forts secured the French base in the Tonkin Delta against Viet Minh main force units. However, Viet Minh infiltration and increasingly sophisticated main force threats meant that an economy of force measure ultimately became a manpower drain. This impacted the growth of the territorial commands relative to the available mobile forces--either organic local reserve mobile forces or higher command mobile forces in operational commands. This is because the static defense mission was given to the territorial commands in addition to the pacification and lines of communication security missions. Even by the end of the war, with the mobilization of additional combat units specifically for mobile warfare, the French had to maintain at least two-thirds of their available combat formations in static or pacification duties working for the territorial commands. 11

Another consideration of territorial commands is their impact on mobile forces.

French mobile forces were grouped at the operational level into operational commands.

The operational commands, typically composed of mobile groups and airborne battalions, were provided by the theater commander to the territories. From there, they could be employed independently in areas outside the subdivisions of the territory, such as at the

airhead at Dien Bien Phu which was well outside the Tonkin Delta and therefore not encompassed within the borders of any zonal headquarters of the North Vietnam Territorial Headquarters or within zonal areas of operations. In the later case, a command and control problem would often arise between the static units assigned to the local territorial command and the intervening mobile units. 12 Another organizational impact was that the resources for the territorial headquarters came from field units. Thus, a subsector commander might be the commander of the battalion operating there, but dedicated sector commands and zone commands were constituted by what would have been the regimental and divisional headquarters of a conventional organization. When large operational commands needed to be formed, such as the regimental equivalent mobile groups, resources to staff these commands were scarce and the resultant units were light. Finally, the continued Viet Minh challenges to the system of fortifications and the general pacification, security, and defense tasks assigned to the territorial commands meant that these inherently manpower-intensive tasks became even more manpower intensive to the detriment of forces available for operational commands. Even the end state French military organization envisioned by the Navarre Plan, which called for five infantry and one airborne divisions in addition to the various territorial divisions in the territorial commands, also required 86 infantry and 132 light infantry commando battalions for defense and pacification. ¹³

The final consideration of the French territorial commands in Indochina had to do with the military circle requirement of sector and subsector commanders. Attempting to obtain intelligence on the local subversive threat, supporting the French colonial or later nascent native government administration, and supporting the local economy while

engaging in psychological operations were additional duties inherent with the pacification responsibilities of the territorial units. The French military concentrated on using military action to defeat the armed elements of the Viet Minh and in utilizing native populations as militias or auxiliaries. However, special organization for pacification was not incorporated on a large scale into the French military in Indochina due to the separation of military and political authority in the theater. The military was required only to "suppress rebellious attitudes" and "create self-defense organizations." More detailed civil affairs or infrastructure development was left to civil authorities or taken upon on local initiative in the military circle tradition. Limited attempts were made to incorporate the psychological elements of counterrevolutionary warfare in Indochina. From 1946 to 1952, the territorial commands had "propaganda sections." These became "psychological warfare bureaus" in 1953 as a presage to what would be used in Algeria. This was, though, an under-resourced initiative that had little impact but showed much promise for future application. The propagand is a presage to the propagand in the propagand initiative that had little impact but showed much promise for future application.

Infantry Organization

Infantry was the primary component of the Expeditionary Corps. The infantry provided the security and pacification forces for the territorial commands, searched for enemy units, and fought the close battle against the Viet Minh main force. The opponent was almost exclusively an infantry force--either local guerrilla units or the light infantry based main force. A combination of operational requirements for infantry, the difficult and undeveloped terrain, the use of territorial garrisons as operational bases with the consequent reduction in requirement for mobile logistics units, and lack of much heavy equipment relative to European norms meant that infantry comprised 52.3 percent of the

total force. 18 This compares to the World War II American Army average of about 12 percent of a total force. Another way of looking at the amount of infantry the French were able to squeeze out of their manning levels is that the end state of the French force under the Navarre Plan, which was nearly reached in raw numbers if not trained headquarters, called for ninety French infantry and airborne battalions (including colonial, foreign legion, metropolitan, North African, and Senegalese; but with up to 60 percent of some units actually comprised of indigenous personnel), plus an additional 219 Army of Vietnam infantry and light infantry commando battalions, plus five Royal Laotian battalions, plus seven Cambodian battalions. This comes to a total of 322 light, airborne, and infantry battalions--to put six maneuver divisions against the Viet Minh main force while retaining 236 battalions outside maneuver divisions for security and pacification. ¹⁹ The constant rotations, reorganizations, and dissolutions of battalions kept the total French battalion count fluid after the institution of de Lattre's yellowing concept of using indigenous personnel, but for most of the later part of the war the French had between 150 to 200 infantry battalions of all types available within a personnel strength (Expeditionary Corps and Associated States) of between 300,000 to 440,000. This compares favorably to the United States's peak effort in the later Vietnam War of 105 Army and Marine infantry battalions within a personnel strength of over 500.000.²⁰ While the United States also trained, advised, and equipped numerous South Vietnamese units to bolster infantry strength, the difference points to the fact that the French force was not the massively equipped conventional force frequently described, except in relation to its Viet Minh opponents. The effort was not merely planning, either, for of the end state 322 battalions, all the French, Laotian, and Cambodian battalions existed at the

end of hostilities, as did 174 of the Army of Vietnam battalions.²¹ Of course, these battalions were typically very under strength, and the polyglot nature of the army meant that their actual combat capability was extremely disparate from unit to unit.²² Despite these large numbers of infantry units, the total theater density of infantry amounted to one soldier per two square kilometers of Indochina.²³ The French fought the war with an infantry army, and an examination of the organizational development of these infantry battalions will demonstrate the mechanics of the combat.²⁴

The French began the war with two types of formal infantry organizations--the normal type battalion based upon the American organization of World War II and the Special Air Service pattern airborne battalions. The normal type battalions consisted of a headquarters, a weapons company with medium mortar, medium machine gun, and antitank platoons, and three rifle companies, each with a weapons platoon and three rifle platoons. The maneuver element was the squad, consisting of twelve soldiers with an automatic rifle and some combination of rifles and submachine guns. The enemy at the beginning of the war consisted of small guerrilla elements and the requirement for area presence dictated dismounted movement—and therefore a simultaneous reduction of heavy weapons and an increase in dismounted riflemen. The Special Air Service airborne battalions comprised three companies, each of two platoons, each of three sticks with twelve soldiers per stick. These sticks had more submachine guns and demolitions than their infantry counterparts, but the lack of heavy weapons, reliance on jeeps, and the small number of platoons soon called for a change in this organization.

Reorganizations in the late 1940s resulted in the Far East Pattern infantry battalion and the Parachute Commando battalion. The Far East Pattern infantry battalion

would remain the standard French battalion organization until the end of the war, with mixed results on the battlefield. It was a modification of the normal type infantry battalion to permit greater foot mobility while relying on outside combined arms for any necessary firepower. Motor transport was consolidated at the battalion headquarters, and heavy weapons were greatly reduced. The battalion consisted of a headquarters which included a reduced medium mortar platoon and four rifle companies each of a reduced weapons platoon and three rifle platoons organized as before. ²⁵ The design permitted greater dismounted infantry presence, but its reliance on motorized logistics and motorized artillery support led to it being paradoxically tied to roads. The Parachute Commando battalions consisted of a headquarters company similar to the Far East Pattern battalion headquarters company with a few mortars some motor transport and nine commandos of which six were comprised of French personnel and three were comprised of indigenous personnel. These commandos were grouped into one indigenous and three French companies--each of which also had a small weapons platoon similar to that found in the Far East Pattern battalions. The commandos comprised a small platoon headquarters and three fifteen-man sticks which now had a dedicated sniper and yet more submachine guns. 26 These airborne battalions were very effective in their intended role of airborne assault and operations remote from French areas of control. They effectively utilized indigenous personnel, and they included within the sticks everything needed for fire and maneuver tactics. Their extra ration of automatic weapons also gave them a relative firepower advantage compared to other French infantry in the close fight.

Both of these types of battalions were refined again after de Lattre's reforms. The Far East Pattern battalion changed in that 57-millimeter recoilless rifles were added, and

the rifle companies changed from three to four platoons. However, this was done within the same personnel strength; the French moved the lowest level of tactical employment from the squad up to the platoon level as each squad was either an automatic rifle or a rifle-grenadier squad, with one of each per platoon. The interesting point about this final reorganization is that it was done to mitigate French losses in cadres, as well as accommodate the incorporation of indigenous personnel directly into all infantry units. By moving tactics from the squad to the platoon level, the number of leaders required was reduced from about six per platoon to two per platoon, or of eighteen per company down to eight. Other than the four recoilless rifles per battalion, overall battalion firepower remained unchanged with the ninth automatic rifle per company being used for company headquarters security.²⁷ The airborne battalions were also affected by the losses of late 1950, and were reorganized along the Far East Pattern albeit with an even greater authorization for indigenous personnel in that half the unit was authorized to be indigenous, and as they were more easily replaced actual percentages were often higher. The airborne battalions also had more personnel in their headquarters company to account for parachute packing and other facets of airborne operations. As these headquarters personnel were also trained parachute infantry, the airborne battalions had an advantage in maintaining field strength. 28 The end result was that most battalions were organized along the lines of four rifle companies per battalion, four rifle platoons per company, and two squads per platoon.

The capabilities of the parachute commandos were recognized, and an attempt to duplicate them was made by de Lattre's organization of company-sized commandos throughout the theater. Comprised of hand-picked French cadre and indigenous personnel

who were often Viet Minh prisoners, these units were organized with three platoons per commando, with two squads per platoon. These squads were organized as the previous parachute commando sticks had been, that is with fifteen personnel and the capability of independent tactical employment. These commandos were organized on the basis of one per *Dinassaut*, one per sector, and a few additional for each territorial command. Being independent companies with no heavy weapons and only six squads each, their capability in combat against Viet Minh main force units was limited to patrolling.²⁹

The relative effectiveness of these infantry unit organizations compared to the Viet Minh has to do with logistics and firepower and to a lesser extent with field fortifications; all taken within the context of the terrain. The so-called "war of wide-open spaces" was a product of this relative paucity of troops spread over the whole of Indochina. The distance between base areas and combat areas could be great, and much time was necessarily spent by both sides on reconnaissance and patrolling. The French were in a hostile land, and had to either establish bases which also needed support, or required ground transport. The French used motor transport with some use of the limited rail network and also river and air supply as limited resources and terrain permitted. This was one reason for the very light French infantry being nonetheless tied to roads. The Viet Minh, in contrast, used an elaborate system of coolies with bicycles, animal transport, and pack boards, and local guerrilla units for trail construction, maintenance, and security, which permitted movements regardless of the road network. Firepower was another facet of infantry organization. The French relied on air and artillery support for most of their firepower when engaged with the Viet Minh main forces, and to a lesser extent also when dealing with local guerrillas. This external fire support, plus the desire

to be light, meant that French infantry had relatively light organic firepower for the close fight out to 300 meters. The Viet Minh had virtually no air force and only one division of artillery. Their infantry therefore had to provide all their own firepower. As this method could not cope with French artillery and airpower, the Viet Minh utilized their greater maneuverability away from the roads, intelligence of French activities, and prepared battlefields to maximize the occurrence of combat at close range. At close range, the French supporting firepower could not always be employed without risk of fratricide, and the Viet Minh had greater firepower since they equipped their main force infantry with more automatic weapons compared to French units. The Viet Minh also retained the three rifle to one heavy weapons structure of their infantry, so Viet Minh infantry units had greater amounts of mortars and shaped charge projectors than the French, too. The result of this firepower disparity at close range was that the French were even more tied to the roads, as they had to always keep within range of their motorized artillery. 30 As the primary artillery support was provided by 105-millimeter pieces, this effectively tied French infantry to within ten kilometers of a road network or base. Field fortifications affected this equation in that expertly camouflaged tunnels and positions provided the Viet Minh with both logistics support and with a means to entrap the French at close range while sheltering from French artillery and airpower. For the French, fortifications provided visible and isolated targets within which the French could attempt to keep the Viet Minh at a distance, albeit with gradually reduced effectiveness as the war dragged on. The use of fortifications by the French as a partial reaction to the Viet Minh main force close fight capabilities was a negative impact on French organizational development as it was a reaction in lieu of providing greater close fight capabilities to

their own infantry.³¹ One possibility to revert the fortification system back to an economy of force measure would have been to reorganize the static infantry appropriately for duty in the de Lattre Line. Such was the case of the Maginot Line, which was garrisoned by specially organized fortress infantry. This was not done because infantry battalions often rotated between various functions, and the 1940 defeat was fresh in memory and had discredited the fortress infantry concept.³²

A final consideration to illustrate the French infantry's firepower disparity in close combat with Viet Minh main force units is to consider platoon comparisons. The French had an infantry platoon with three, later two, automatic rifles and up to six submachine guns. Up to three snipers and several rifle-grenade launchers were also provided. The comparable Viet Minh main force infantry platoon would have had two or three light machine guns, that is belt fed vice box fed automatic rifles, and six to nine submachine guns. Some units may also have had early designed rocket-propelled grenade launchers. To add to the disparity, the Viet Minh would have had close support from company and battalion mortars while the French would likely have not used their small number of mortars but rather relied on artillery support. If the Viet Minh could hug the French or fight from prepared positions, the French artillery would have had little effect and the Viet Minh would then enjoy greater firepower on a unit to unit basis. As this comparison was not valid for small guerrilla units, the French were not able to readily differentiate the difference until the end of the war. ³³ General Navarre, the French theater commander from 1953 to 1954, stated during the Dien Bien Phu inquiry, "If we sent our infantry, given its present quality, outside the radius within which it enjoyed artillery support, then if it encountered Viet Minh infantry, it would be beaten. We were

absolutely convinced of our superiority in defensive fortified positions; that was considered in Indochina as a dogma."³⁴

Mobile Forces

The original Expeditionary Corps deployed to reoccupy Indochina was a mobile force in its entirety. As it transitioned into a territorial organization, with infantry battalions and a few company-sized mounted formations spread over as much terrain as the French felt they could control, the reserve of mobile units available for offensives and reinforcements was reduced to a few infantry battalions shaken from territorial pacification and security duties, a few parachute battalions, and small riverine and cavalry units. Prior to late 1950, the French considered this sufficient to combat small guerrilla units. The introduction of several divisions worth of Viet Minh light infantry changed the equation, and the French began to husband resources to provide the theater command additional mobile units to be parceled to the Territorial Commands. Too late, the French decided to create an entire corps of mobile troops to defeat the Viet Minh main force in the 1954-1955 campaign season. ³⁵

After the failure of Operation Lea in 1947 to defeat the Viet Minh, and the consequent return to territorial pacification and security duties while the Viet Minh built their main force units, French mobile forces were limited to parachute battalions, riverine units, and any territorial units made temporarily available in provisional march columns. The French deployed eight parachute commando battalions by late 1950 as the vanguard of their mobile forces. These battalions operated independently, and their two brigade equivalent headquarters served more as operational level coordination cells than as tactical headquarters to control multiple battalions in battle. In the late 1940s, the

French formed seven naval assault divisions or *Dinassauts* for riverine combat. An outgrowth of the river flotillas that the French Marines had invented during the reoccupation of Indochina, these units comprised variable numbers of amphibious landing craft that had been modified for river combat. They could provide fires support or transport up to a battalion of infantry each. In the Tonkin and Mekong delta areas, they provided a relatively fast, protected, firesupported maneuver force. Finally, in the later 1940s the French began experimenting with a few mobile groups based on lessons learned in colonial North Africa. Mobile groups were small regimental equivalent headquarters that controlled combined arms groupings of two to four infantry battalions, an artillery battalion, and occasionally company-sized armor and engineer units. These units were necessitated by the fact that the standard infantry regiment had been dissolved in Indochina, and the Sector Command utilized in its place. Multiple independent infantry battalions conducting mobile operations were thus bereft of a higher control element until the introduction of mobile group headquarters. The first such unit was the North African Mobile Group, comprised of infantry battalions from France's North African colonies and protectorates, which was destroyed along with two parachute battalions while attempting to help extricate garrisons in the late 1950 Colonial Route 4 battles.³⁸

Among General de Lattre's reforms was the expansion of French mobile forces to respond to attacks on the de Lattre line, as well as to conduct offensive operations against Viet Minh base areas. By accelerating the formation of armies for the associated states, he increased total available troop strength with no increase in French military personnel. He could thus make good the losses from previous battles, and he built his parachute force up to a strength of six French, three Army of Vietnam, one Laotian, and one

Cambodian battalions. He added two *Dinassauts* to his riverine capabilities. Most significantly, he expanded the mobile group concept by staffing first four, and ultimately eleven French and seven Vietnamese, of these formations and providing them between three and four infantry battalions plus an artillery battalion and occasional armor company each. ³⁹ The infantry battalions could conduct motorized movements of either one-third their total force, or their entire force in three relays. Some mobile groups secured additional motor transport to become entirely motorized, as the artillery and mobile group headquarters were completely motorized with organic assets. The motorization of the infantry provided immediate rapid movement capability, and since the infantry was tied to the roads anyways due to the motorization of the artillery, this was seen as an asset rather than a liability. Mechanized forces were consolidated into amphibious groups of various amphibious vehicles capable of traveling through swamps, and armored sub-groups of mixed light tank and motorized or mechanized infantry. Each delta region had an equivalent of a regiment of amphibious and armored units available for mobile operations. 40 General de Lattre also provided for company-sized commando units which sometimes were attached to mobile groups or conducted limited raids on their own.

The main problem with de Lattre's expanded mobile force was the same as the problem with the sector infantry, its ties to the road network. Even the armored units had most of their infantry on trucks or half-tracks. Only the parachute units and commandos were able to operate away from the road network--and that was more a function of their leadership and training than design. In the immediate aftermath of the Colonial Route 4 battles, this restriction to roads was not of much detriment. General de Lattre was

forming his defensive line around the Tonkin Delta, and his mobile forces principally engaged in counter-attacks and reinforcements as the Viet Minh attempted to break into the delta in division-sized attacks. Late in 1951, as de Lattre was leaving the theater due to an illness which would soon claim his life, the limitations of the road bound French mobile units would be evident. The French would in both the 1951-1952 and the 1952-1953 campaign seasons launch offensives with multiple mobile groups, supported by parachute battalions, armored units, and riverine units, into suspected Viet Minh base areas beyond the de Lattre line. The typical pattern would be a rapid French attaining of their objectives, only to find that the Viet Minh had withdrawn beyond range of the French. This would be followed by the inevitable return of the French to their own base areas, due to insufficient forces to hold ground that was anyways worthless given the absence of the Viet Minh, with ambushes and raids harrying the French the whole trip home. Suggestions to mimic the Viet Minh and create mobile groups that were not road bound did not appear until too late for implementation. 41 However, the idea to utilize the newly introduced helicopter was discussed in mid-1953, and preparations were begun to field an ultimate total of 500 tactical helicopters to provide an extraction capability for the paratroopers as well as a technique to get some of the other mobile troops off the roads. 42 However, the French had fewer than fifty helicopters fielded at war's end.

The final phase in the expansion of French mobile forces in Indochina was too late to win the war, but an ironic return to the original concept of the Expeditionary Corps in that a battle corps was to be formed by combining the mobile groups into divisions and the divisions into a corps. ⁴³ The ultimate French force in Indochina would then have

comprised three corps equivalent territorial commands, minor territorial commands for Cambodia and Laos, plus the one maneuver corps.

This French maneuver corps was to consist of six divisions divided into four French and one Vietnamese infantry divisions and one French airborne division. The subunits of these divisions were to come from thirteen French and nine Vietnamese mobile groups and from two French and one Vietnamese airborne groups, which were essentially mobile groups comprised of parachute battalions and mortar companies. Additional corps troops included five armored battalions, five motorized reconnaissance battalions, five amphibious battalions, and four extra artillery battalions. 44 The pieces of this corps had been largely assembled by the end of the war in mid-1954, but concentrating them into divisions did not occur because the 1953-1954 campaign season resulted in this force being "dissipated" into four separate areas. 45 A force of twenty-five infantry battalions was engaged in a fruitless clearing operation along the Annam coast (near the "Street without Joy" area), fifteen were deployed to Laos to defend against the Viet Minh's 1953-1954 assault on that country, twelve were tied up in the Dien Bien Phu airhead, and eighteen were kept as a response force in the Tonkin delta. 46 Whether the French maneuver corps could have salvaged victory, or more likely a better negotiated settlement, is a matter of conjecture that cannot be proven given the dissipation of the assembled force and destruction of much of it at Dien Bien Phu, but the concept was clearly sound if instituted too late given the rapid increase in Viet Minh main force strength. The basic outline, though, of three territorial corps and one maneuver corps for a field army equivalent theater would be again instituted in Algeria, with better results.

Organization for Fire Support

The French relied on fire support external to its infantry formations. The principal fire support agency for the French was their artillery, while air support provided a highly touted but less abundant or effective fire support.

The French artillery which accompanied the original Expeditionary Corps was rapidly broken into small elements to support the various posts the territories occupied. Gradually, artillery was regrouped in traditional field battalions as mobile forces were expanded. The French artillery therefore

quickly became identified as follows:

Position artillery, either fixed or semimobile;

Field artillery, consisting of artillery battalions assigned to the mobile groups, held in general reserve, or, occasionally, made available to some area commanders.⁴⁷

The distribution of artillery was such that by the time of General de Lattre's reforms, the French had 228 positional pieces and 240 field pieces in Indochina. Except for a single battery of 155-millimeter guns in Tonkin, these were mostly 105-millimeter howitzers and a few 155-millimeter howitzers. By the war's end, these numbers had increased to 323 positional pieces and 370 field pieces. ⁴⁸ The field pieces were assigned to battalions containing twelve howitzers each on a ratio of one artillery battalion per mobile group and a few extra for general support. ⁴⁹ The positional artillery was spread, usually in two-weapon platoons, along the de Lattre Line and at similar posts in the other commands. Typically, they were spread so they would be mutually supporting, so by the end of the war 323 pieces could have occupied 160 positions covering a 3,200-kilometer front. ⁵⁰ This dissipation of artillery was done as a psychological support to the troops,

whom the French believed needed to know that artillery support was always available, however sparse such support may have been, as well as a tactical requirement given the firepower advantage Viet Minh main force infantry had relative to French infantry units.

After the defeat of the Viet Minh's assaults on the de Lattre Line in 1951, the French artillery became less effective. Spread out over vast distances, it could not mass sufficiently. The mobile units were reliant on 105-millimeter pieces which could not destroy the deep Viet Minh field fortifications.⁵² Not possessing the ability to displace artillery by helicopter, as America would do in the next war; the French artillery was a prime cause of the tethering of French infantry to the roads. The French infantry brought few mortars to the battlefield as they relied on the 105-millimeter pieces for most of their support. In contrast, the Viet Minh had one heavy division which contained all their traditional artillery; and their infantry used recoilless rifles, mortars, and light artillery pieces (typically 75-millimeter) to obtain fire support that could be maintained in the close fight. The advantage of this organization was that equipment and ammunition could be packed by animal or bicycle and brought directly to the fight with direct lay employment. The French, though, did not attempt to reorganize their artillery for nonmotorized or nonindirect lay employment. Review of their lessons learned reports indicates the idea was considered in the context of providing either heavy mortars or recoilless rifles to mobile groups operating away from the relatively good delta road networks.53

The paucity of artillery coverage, plus the fact that the available artillery was not sufficient to destroy Viet Minh field works, implies a reliance on airpower for

responsiveness and destructive power. While generally meeting the demand of responsiveness and devastating to troops caught in the open, the French air support assets were not sufficient to provide the power to destroy Viet Minh fortifications. The French estimated they would have needed 200 heavy bombers to affect the Viet Minh main force's logistics and fortifications.⁵⁴ In fact, as late as June 1953 the combined naval aviation and air force combat strength was 34 medium bombers and 125 fighter-bombers. None of these aircraft were jets and some were World War II vintage. These aircraft were, like the artillery, spread throughout the theater to provide support to all the territorial commands with northern, central, and southern air commands corresponding to the army's territorial commands. 55 A French historian has further posited, in reinforcement of French contemporary military analysis, that "The loss of Dien Bien Phu is largely explained by the lack of B26 and B29 bombers."⁵⁶ French air strength figures were inflated by the presence of an aircraft carrier--one of France's two of the time-which could not be maintained continuously as ships require three to four ships in inventory for every one on station.⁵⁷ Therefore, the combination of Viet Minh countermeasures and a paucity of means thwarted the French scheme of employing overwhelming airpower to achieve battlefield victory.⁵⁸

Despite the problem with mass, French fire support was notable for being flexible, responsive, and generally available. Availability was ensured by tethering infantry to road networks; but there was an organizational aspect to the flexibility and responsiveness. In addition to forward observers and liaison officers, the French Army's light artillery observation aviation, which was the precursor to the French Army's aviation branch formed some months after the war, and the air force established three

joint observation and fire control squadrons. On an approximate sortic ratio of one plane per battalion on operations, these planes were able to loiter the battlefield and adjust both artillery and close air support. That the air support was piston rather than jet engined assisted this process, since slow low-level flight facilitated observation. Despite some concerns with this unorthodox innovation, aerial observer-fire controllers would be an even more prominent fire support solution in the next war in Algeria. ⁵⁹

Organization of Indigenous Personnel

The vast geographical regions, the strength of the opposition, and political factors indicated that France would have to rely on indigenous manpower to provide the number of personnel required. French law of the time prohibited employment of French conscripts, although not of Foreign Legionnaires or colonial units from Africa, but the impetus to mobilize large numbers of Indochinese did not occur until after the 1950 Colonial Route 4 defeats and General de Lattre's reforms. Prior to 1950, indigenous personnel utilization was halfhearted and limited to former members of the Tonkinese Rifles. The primary military ground force uses for indigenous personnel were for militias, auxiliaries, augmentation to French units, and the establishment of the armies of the Associated States.

The French began use of militias early in the war, with political agreements with several autonomous religious sects in the southern part of Vietnam and the Catholic Militia in Tonkin. These associations lasted until the end of the war and had some success in countering Viet Minh activity within certain areas, but not without a price in French credibility or the new Associated States' sovereignty. As they were organized separately from the French military, and were unique to the circumstances of the time, they are not

further discussed in this thesis as they are outside this work's scope beyond mentioning there existence. Of more interest are the militias, called self-defense forces by the French, purposely established for local security.

The French considered a key aspect in any pacification campaign to be the reduction of enemy activity to the point where the military could depart the area, albeit with an appropriate response capability in the event of an enemy return, and the securing of the population by militias of the area's inhabitants. ⁶⁰ In practice, the French lagged behind the Viet Minh's infrastructure development and their militia development was similar to their mobile force development in being instituted at a slower rate than their opponents. French units had, at the battalion level, begun establishing local militias in their subsectors as early as 1947. Typically twenty men with some rifles, these militias were not supported extensively and were ably countered by the end of 1948 in contested areas by an influx of Viet Minh regional cadres. ⁶¹ In 1952, the French returned to the idea of local militias as a possible part of the pacification solution, and reenergized their militia development program. Village chiefs were charged with recruiting and commanding local personnel, while the military would provide arms and the civil authorities would provide administrative control. The difference from previous efforts was that the militia would be semipermanent at the village level and that there would be a hierarchy of permanent units at higher political administrative levels. These higher level militias worked closely with the civil police organization which was a paramilitary formation known as the National Guard. 62 The predictable Viet Minh reaction to this development was an offensive by their corresponding regional guerrilla infrastructure to assassinate militia leaders and steal their arms. The new militia organization suffered

from poor leadership and a significant shortage of weapons. One example was of sixteen militia men armed with eight outdated rifles. ⁶³ The solution to the militia organization was to essentially mimic the Viet Minh regional organization with a pro-French version. Beginning in January 1953, the revitalized militia program took the vulnerable village out of the organization and replaced all previous militias with company-sized units for every ten villages. Women were also incorporated into the system for counter-espionage, communication, training, and propaganda functions in further imitation of the Viet Minh. ⁶⁴ In a precursor to later French counterrevolutionary warfare doctrine, psychological warfare was recognized as a principal function of militias. ⁶⁵ By April 1954 a battalion-sized unit to reinforce the local company-sized elements was created in Tonkin called an "inter-district" unit but as an indication of the lateness of the concept, this first battalion would also be the last such unit formed. ⁶⁶

Auxiliaries formed a critical portion of the French forces. Recruited by battalions from local personnel, and even from Viet Minh prisoners, and loosely administered by the territorial command, auxiliary units were formed early in the war and retained to the end. The typical arrangement was for a small company of auxiliaries per infantry battalion of about four French cadre and one hundred auxiliaries per company, with additional companies organized by higher echelons. By the end of the war, almost 1,100 such companies existed in both the French and the Associated States' armies. They were originally formed to assist in the performance of mundane tasks such as manning watch towers posted along lines of communication, but as the war intensified the use of auxiliaries increased. Aside from providing additional manpower, auxiliaries provided an advantage to the French in that they were lightly equipped and familiar with

the environment--so therefore they were mobile and familiar with the enemy. They were not a panacea; they often brought their families to the military post and their lack of heavy equipment or training precluded an ability to withstand assaults or conduct other conventional infantry operations. ⁶⁹ The French lessons learned report indicates that the primary missions for auxiliaries ought to have been village searches, reconnaissance, infiltration, and other patrol-type operations. ⁷⁰ A missed opportunity the French realized too late was that auxiliaries would have been an excellent organization to establish human intelligence cells much as the Viet Minh did. ⁷¹

An offshoot of the auxiliaries was the commandos. The French used the term commando loosely in Indochina, and it referred to all manner of units (to include war dog units). 72 The term came to the French from British support of Free-French units organized along British Commando lines in World War II, while the British had taken the term from the Boer militias of the Boer War. However, the primary commando force for the French in Indochina was that composed of select auxiliaries cadred by select French officers and sergeants and administratively controlled by the Territorial Commands. These commandos were developed by local initiative early in the war, but the prime impetus for their development was General de Lattre's reforms in 1951.⁷³ These commandos came in four variations, three of which are pertinent to this discussion: most were "normal" or sector commandos which typically support a sector command with local reconnaissance and other patrol operations, the amphibious commandos, also called accompanying commandos, which provided a limited organic infantry element to the Dinassauts, and the reserve or shock commandos which conducted deep-penetration missions. All of these units were organized with six to nine French cadre personnel and

120 indigenous personnel. They formed a headquarters and three platoons each of two squads organized along the lines of the 1940s parachute commandos. ⁷⁴ Sixteen sector commandos, five amphibious commandos, and six shock commandos were formed in Tonkin alone. ⁷⁵ Operating lightly, often disguised as Viet Minh, and utilizing daring patrol tactics, the Commandos enjoyed many successes. However, the profusion of such units created the classic problems of coordination difficulties with local units, scrounging of quality personnel, and inappropriate employment. ⁷⁶ As the Viet Minh recognized the danger these units posed, their French cadre were often the target of assassination. ⁷⁷ The interesting French lesson from this experience was that some number of commandos were needed, but in a more controlled fashion. The recommendation was for a limited number of shock commandos for raiding, and intelligence commandos to mimic the successful Viet Minh version known as *Trinh Sats* which would conduct human intelligence, reconnaissance, and other covert activities. ⁷⁸

Beyond the formation of auxiliaries, the French recruited indigenous personnel into the French colonial army. This was generally done at the battalion level, and by the end of the war over half of many ostensibly French units were composed of native personnel. Initially, this was done as a by-product of hiring back former members of the Tonkinese Rifles. After de Lattre's reforms, the process was greatly accelerated. The impolite term used by the French was "yellowing." The exact process varied from each unit, but the typical method was to form an Indochinese battalion in each regiment or sector, an Indochinese company in each battalion, and sometimes an Indochinese platoon in each remaining company. The benefits of this system were in greatly enlarging the size of the army, adding personnel with intimate local knowledge to units, and in denying the

personnel gained to the Viet Minh. The problems were in the thinning of French cadres, in the adoption of the Indochinese's soldiers' families, and the fact that the Viet Minh established an organization known as *Dich Van* cells that enlisted in the French army for intelligence and sabotage. Pespite the challenges, the yellowing system permitted the French to continue the war after 1951 and also permitted the forming of the Army of Vietnam. This new army was created by siphoning off the Indochinese units from some French units, and then forming additional units around them. This system was also a drain on the already scarce French cadres, and it did not permit the organization of many units above battalion level. However, the Army of Vietnam became the nucleus of the South Vietnamese Army which succeeded against all expectations of establishing a state in the south. A mixed blessing of the local recruitment was the provision of interpreters and intelligence staff. These soldiers, known as the "Black Gangs," were the principal agents of torture for the French. This brutality would also transcend the Indochina War into the next.

Brief Summary of Indochina Organizational Lessons

By way of summary, it is worthwhile to examine the organizational lessons the French perceived from their Indochina experience, as these lessons would impact their actions in Algeria. The fact that the French lost the war in Indochina should not result in dismissing these organizational lessons, as they would prove effective when applied in Algeria and would in many cases be mirrored by the United States in Vietnam. The first essential organization point was that counterrevolutionary warfare must have a focus on the population, and therefore the military must be organized on a territorial basis. However, the territorial commands must possess traditional civil authority in contested

areas to ensure unity of effort, as well as a more concerted civil affairs program. For the military to perform these civil affairs and intelligence duties a cadre of trained specialists similar to the Arab Bureaus was deemed needed. 82 A significant psychological warfare structure was also deemed required to conduct training of all personnel, as well as concerted psychological warfare planning and operations.⁸³ A sizeable military threat will necessitate a sizeable mobile force, and the French experience suggests a possible ratio would be one mobile element to every three territorial elements. Mobile units must take advantage of all possible mobility means appropriate to the terrain, as the insurgents will have the benefit of familiarity with the terrain and prestocked caches to increase their mobility. A technological assist for mobile forces would be found in the helicopter, which would supplant the parachute for most intervention tasks. The infantry, the primary arm of counterrevolutionary warfare, must be light to be mobile--but cannot loose its relative combat power to gain that mobility. This was a significant lesson of the Indochina War, and a combination of technological improvements and a less well-armed enemy would rectify the disparity in Algeria. Nonetheless, it was found to be impractical to portage heavy weapons with the infantry, so external support was necessary to provide the firepower overmatch. Artillery was found in Indochina to be a limiting factor due to its reliance on road networks. In Algeria, the French would relegate artillery to the frontiers and expand piston-engine close air support guided by light observation air controllers; while helicopter portage of artillery would not develop until the United States fielded sufficient assets in the 1960s. Finally, indigenous personnel can provide intelligence and reconnaissance capabilities to the military, as well as greater security manpower. Again, this lesson would be carried to Algeria.

These above lessons were considered by the French military, and combined with a healthy study of, and respect for, Maoist insurgency doctrine, an informal doctrine of counterrevolutionary war was promulgated in journals and schools. ⁸⁴ Despite much publicity of this doctrine, it was essentially comprised of the traditional colonial school of warfare with updated lessons from Indochina and consideration of the Maoist communist insurgency theory. Without much chance to debate or refine this evolved doctrine, the French army began implementing some of its concepts in Algeria.

¹Croizat trans., A Translation From the French: Lessons of the War in Indochina, vol. 2, 193.

²James W. McCoy, *Priests of a Dead God*, 1996, [Book on-line]; available from http://www.geocities.com/quikmaneuvers; Internet, 3, 22-23.

³Croizat, *Vietnam River Warfare 1945-1975*, 38.

⁴François David, "Deux theatres, un meme conflit? Le poids de l'Union française sur l'integration atlantique 1952-1956," Revue Historique Des Armees 236 (2004): 20.

⁵Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 288.

⁶Major General Thomas J. H. Trapnell, "Debriefing Remarks, 1954" Report Online available from http://www.mytholyoke.edu/acad/intrel/pentagon/doc41.

⁷Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 56.

⁸Ibid., 116.

⁹Ibid., 122.

¹⁰Ibid., 125-138.

¹¹Trapnell, "Debriefing Remarks."

¹²Coizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 104-105.

¹³Trapnell, "Debriefing Remarks."

¹⁴Coizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 39.

¹⁵Ibid., 110.

¹⁶Ibid., 41.

¹⁷Ibid., 41.

¹⁸Ibid., 216.

¹⁹Trapnell, "Debriefing Remarks."

²⁰Shelby L. Stanton, *Vietnam Order of Battle* (New York, NY: Galahad Books, 1986), provides histories of every US battalion.

²¹Lieutenant General Dong Van Khuyen, *The RVNAF* (Washington, D.C.: US Army Center of Military History, 1980), 5.

²²Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 196.

²³French Army Report (Author and Translator unknown), *Lessons from the Indochina War*, vol. 3 (DTIC File AD804377-3), 32.

²⁴French battalion numbers culled from multiple sources, notably Martin Windrow, The Last Valley; Dien Bien Phu and the French Defeat in Vietnam (Cambridge, MA: De Capo Press, 2004), 170. French battalion numbers fluctuated greatly due to losses, rotations, and changes in unit functions (e.g. an artillery unit performing as an infantry unit, and then reverting to artillery tasks). Also, many units in the overall French force structure defy easy categorization, such as battalions composed of amalgamated companies of auxiliaries. Another challenge is the 1952-1954 transfer of nominally French units to the nascent Army of Vietnam. Units such as the two Muong Battalions, fourth and fifth battalions of Foreign Legion Regiments, and numbered battalions of Colonial Infantry Regiments, were transferred to the Vietnamese Army (with their French cadre) and renamed appropriately. These units are counted here with the Army of Vietnam. Also, 14 French battalions (and part of a 15th) were lost at Dien Bien Phu (as was an Army of Vietnam parachute battalion) while only two of the requested twelve French battalions requested by General Navarre as reinforcements were committed. These two battalions arrived after Dien Bien Phu. For ease of portraying planned force structure, I have depicted the prefall of Dien Bien Phu French battalion count with the Armistice Army of Vietnam count. This avoids confusion as well as permits easy verification with sources. The "French" battalions I counted in the total of 90 infantry battalions are: 6 parachute (1 metropolitan, two Foreign Legion, three Colonial), 12 Foreign Legion infantry, five Metropolitan volunteer infantry, 36 North African infantry (including 3 Moroccan Tabors; and 17 Algerian, 14 Moroccan, and 2 Tunisian Tirailleurs), 13 African infantry (including Senegalese, West African, and

Central African Tirailleurs), and 18 Colonial infantry (including the 2-battalion Korea Regiment, the 3 T'ai battalions, and the Indochinese March Battalion). As the French retained operational control of Army of Vietnam units in the field, the difference between "French" and "Vietnamese" battalions is often academic; some elite Vietnamese battalions had more Frenchman than nominally "French" battalions!

²⁵Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 216.

²⁶J-Y Morvan, "2eme Regiment Etranger de Parachutistes" [article on-line]; available from http://www.2eme-rep-moremajorum.com/; Internet.

²⁷French Army Report (Author and Translator unknown), *Lessons from the Indochina War*, vol. 3, 53-59.

²⁸Ibid., 61-62.

²⁹Pissardy, *Commandos Nord-Vietnam*, 55.

³⁰French Army Report (Author and Translator unknown), *Lessons from the Indochina War*, vol. 3, 1-43; and McCoy, *Priests of a Dead God, The French vs the Vietminh, 1st Indochina War*, 3,9, 22-23; and Bernard Fall, *Street Without Joy* (Harrisburg, PA: Stackpole, 1966), 70. The lower Viet Minh weapons counts reflect contemporary French Intelligence reports, which can be found at: Nowfel Leulliot and Danny O'Hara, "Indo 1945-1954, From Haiphong to Dien Bien Phu," [Article on-line]; available from http://members.lycos.co.uk/Indochine/misc/glossary.html; Internet.

³¹French Army Report (Author and Translator unknown). *Lessons from the Indochina War*, vol. 3, 5-13, 19-31.

³²Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 228-231.

³³Ibid., 4.

³⁴Windrow, *The Last Valley; Dien Bien Phu and the French Defeat in Vietnam*, 222 provides the quotes from the French official commission. Elsewhere in Windrow's book he discusses the organizational differences between the Viet Minh regulars and the French; however while he recognizes the disparity in mortars, shaped charge projectors, and submachine guns, he is unclear of Viet Minh light machine gun capabilities in his Chapter Four and confuses French automatic rifles for light machine guns in his Chapter Five.

³⁵Admiral Arthur Radford, "The Navarre Concept for Operations in Indochina (Memorandum for the Secretary of Defense by the Chairman of the Joint Chiefs of Staff, 28 August 1953," [Report on-line]; available from http://www.mtholyoke.edu/adad/intrel/pentagon/doc17.htm; Internet.

³⁶Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 206.

³⁷Morvan, "2eme Regiment Etranger de Parachutistes."

³⁸Ibid.,

 $^{39}\mbox{Croizat}, A$ Translation From the French: Lessons of the War in Indochina, vol. 2, 207-208.

⁴⁰Ibid., 262-267.

⁴¹Ibid., 213-214.

⁴²Ibid., 304.

⁴³Croizat, *A Translation From the French: Lessons of the War in Indochina*, vol. 2, 207; and Radford, "The Navarre Concept" and Trapnell, "Debriefing Remarks."

⁴⁴Trapnell, "Debriefing Remarks."

⁴⁵Ibid..

⁴⁶Ibid.,

⁴⁷Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 275.

⁴⁸Ibid., 275.

⁴⁹Ibid., 288.

⁵⁰Ibid., 276-281.

⁵¹Ibid., 283, categorizes "psychological fires" as an artillery operation along with traditional supporting fires, harassing fires and counterpreparation fires.

⁵²French Army Report (Author and Translator unknown), *Lessons from the Indochina War*, vol. 3, 10.

⁵³Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 213-214.

⁵⁴French Army Report (Author and Translator unknown), *Lessons from the Indochina War*, vol. 3, 33.

⁵⁵National Intelligence Estimate – 91, "Probable developments in Indochina through 1954, Annex A-C," [Report on-line]; available from http://mtholyke.edu/adad/intrel/pentagon/doc15.htm; Internet.

⁵⁶David, "Deux theatres, un meme conflit? Le poids de l'Union française sur l'integration atlantique 1952-1956," 21.

 $^{57}\mbox{National Intelligence Estimate} - 91, "Probable developments in Indochina through 1954, Annex A-C."$

⁵⁸French Army Report (Author and Translator unknown), *Lessons from the Indochina War*, vol. 2, 32-35.

⁵⁹French Army Report (Author and Translator unknown), *Lessons from the Indochina War*, vol. 3, 98; and Croizat, *A Translation From the French: Lessons of the War in Indochina*, vol. 2, 291-298.

⁶⁰Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 113-115.

⁶¹Jean-Marc Le Page, "Le Quotidien de la pacification au Tonkin," Revue Historique Des Armees 1 (2003): 35-36.

⁶²Ibid., 38.

⁶³Ibid., 38.

⁶⁴Ibid., 40.

⁶⁵Ibid., 41.

⁶⁶Ibid., 42.

⁶⁷Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 232.

⁶⁸Trapnell, "Debriefing Remarks."

 $^{69}\mbox{Croizat}, A$ Translation From the French: Lessons of the War in Indochina, vol. 2, 233-235.

⁷⁰Ibid., 235.

⁷¹Ibid., 235.

⁷²Ibid., 236.

⁷³Pissardy, *Commandos*, 18-20.

⁷⁴Ibid., 55.

⁷⁵Ibid., 47.

 $^{76}\mbox{Croizat}, A$ Translation From the French: Lessons of the War in Indochina, vol. 2, 240-242.

⁷⁷Pissardy, *Commandos*, 27-30.

 $^{78}\mbox{Croizat}, A$ Translation From the French: Lessons of the War in Indochina, vol. 2, 241.

⁷⁹Ibid., 59.

⁸⁰Khuyen, *The RVNAF*, 5.

⁸¹Douglas Porch, *The French Foreign Legion* (New York, New York: Harpers Publishers, 1991), 541.

 $^{82}\mbox{Croizat}, A$ Translation From the French: Lessons of the War in Indochina, vol. 2, 38.

⁸³Ibid., 41.

⁸⁴Ian R. W. Beckett, *Modern Insurgencies and Counter-Insurgencies. Guerrillas and their Opponents since 1750* (New York, NY: Routledge, 2003), 159.

CHAPTER 4

ORGANIZATIONAL DEVELOPMENT DURING THE WAR IN ALGERIA

When I left my command in November 1959, I was given a short refresher course in NATO matters and sent to a weapons demonstration in the Pacific. I stayed away about five weeks. In the meantime, my wife drove all by herself in our private car to say goodbye to our friends in the Oran area. It was absolutely safe, as it had been from 1942 to 1954. The war was over. The political rumble was not over at all, but the war was over. After that, we had the negotiations. ¹

General Y. P. Ezzano, "The Role of Airpower in Counterinsurgency and Unconventional Warfare"

French ground force organizational development for counterrevolutionary warfare reached its pinnacle by the end of the war in Algeria. By 1962, the lessons of Indochina, which were in turn based on historic colonial war concepts, had been refined and applied for a military success. For political reasons, France's military success in Algeria was made irrelevant. After the announcement of Algerian independence, and consequent turmoil in French politics and civil-military relations, the military accomplishments in Algeria were discredited. Also, with Algerian independence, France no longer required a counterrevolutionary doctrine and France turned instead towards European conventional defense, small interventions in the remaining overseas territories, and nuclear deterrence. The rest of the world paid little heed to French lessons, perhaps due to a perception that since France had lost, so that there must have been little to learn militarily. The post-Vietnam focus of the United States reinforced the neglect of French lessons in Algeria. A new look reveals compelling organizational development examples worthy of study. These are best examined by a review of the history of both the Algerian War and French organizational developments outside Algeria, followed by detailed examination of the

focus areas of territorial organization, infantry organization, mobile forces, fire support, and indigenous personnel organization.

Brief History of the War in Algeria

French involvement in Algeria can be traced to 1830, when French troops landed to suppress piracy and then to extend control over the country. Resistance was substantial, and the French fought into the 1850s in a number of campaigns that introduced many of the operational concepts of the colonial school of warfare. As relative peace settled over Algeria, large numbers of Europeans began settling the country and introducing modern agriculture and industry. Politically, Algeria became more than a French colony since it was made a department of France (which is similar to a state in the United States of America). The ultimately insurmountable difficulties with this political arrangement were the ethnic, religious, and cultural disparities between Frenchmen and Arab and Berber Muslims. Nonetheless, Algerians fought ably in the French Army in both world wars and suffered approximately 150,000 killed. The disparity of economic and political conditions between the European colonists and the native Muslims, the performance of Algerians in the service of the French Army, and assumptions about the benefits to Algeria from France's victory in World War II, led to various sentiments among the majority Muslim Algerian population. Most favored either full assimilation in France or outright independence but few desired the continuance of the status quo. These sentiments were dramatically evident in the very bloody Setif Rebellion which began on Victory in Europe Day, 1945. Most of these sentiments were disregarded by the French government which had other problems in the immediate postwar era. Indeed, Algerians were considered loyal enough to deploy to the war in Indochina, with seventeen infantry

battalions engaged there by early 1954.⁴ However, an independence movement had been forming in the shadows, and announced its presence in November 1954 with open rebellion.

The war can be conveniently divided into four distinct phases.⁵ The first phase corresponds to the first year of the conflict, from autumn 1954 to autumn 1955. This period was characterized by lethargic responses from the French, who were preoccupied with such matters as withdrawing from Indochina, and the spreading of the Algerian National Liberation Front (FLN) rebellion. Beginning in late 1955, the war became decidedly more violent with a consequent response from France. The second phase of the war, late 1955 to late 1958, saw the FLN rise to a force with a shadow government of political and intelligence networks over all of Algeria as well as about 40,000 personnel in the Army of the FLN (ALN) organized in up to battalion strength light infantry formations. 6 The French responded in 1956 with the deployment of conscripts and recalled reservists to provide the manpower deemed necessary by the Indochina veterans. Over 400,000 French active military personnel were deployed to Algeria and close to one million personnel overall were engaged in the French security effort when one counts police, Algerian reservists, militias, and so forth in the personnel tally. France also fought the war abroad, with covert operations against international arms smugglers supplying the FLN, as well as the conventional operation in Suez to eliminate perceived support Nasser's Egypt was providing the FLN. This period from late 1955 to late 1958 saw not only the increase in scale of the conflict, but also the halting of the FLN advance in such events as the Battle of Algiers, the establishment of the territorial military system at the local level, and the sealing of the borders. This last point was punctuated by the

Battle of the Frontiers where regular ALN formations in Tunisian and Moroccan sanctuaries failed, at considerable loss, to penetrate French border barriers into Algeria.

The third phase of the conflict, from December 1958 to January 1961, saw the final French offensives to eradicate the FLN. In a series of offensives by the enlarged French intervention reserve, ALN forces were systematically defeated to the point they were reduced to less than 12,000 effectives and could operate only at platoon level and below. ALN forces in sanctuaries simply sat and waited for a negotiated settlement, and the FLN was reduced to operating from its government in exile in Tunisia. However, despite the French military victory, French President Charles de Gaulle, who came to power in 1958, believed that Algerian independence was an eventuality in the long term and a short term drain on resources he wanted to devote to making France a nuclear power. There thus began a series of negotiations which resulted in the final phase of the conflict in which Algeria was granted independence and France, and most of the European colonists, departed Algeria.

The success of the French military in Algeria can be attributed to a variety of factors, some of which may be unique to the particular conflict. Indeed, much of the war against the FLN infrastructure was of a frequently brutal police and intelligence nature in which the military provided the security backdrop, for example as in the Battle of Algiers. Also significant were political, psychological operations, and civil affairs operations to wean the Muslim populace from supporting the FLN. Pertinent to this study are those ground force organizational developments which France used. France was influenced not only by its colonial history and the recent war in Indochina, but also by

independent developments occurring within the French military as part of the worldwide post-World War II military climate.

Organizational Developments in Europe and Suez

While a fraction of the French Army was fighting the war in Indochina, most of the rest of the Army was trying to determine how to best defend the nation and its interests in the postwar era. The postwar period saw France's position in the world changed by its defeat in 1940 as well as the new world power structure. France's army initially focused on a defense against a Soviet attacks against the west utilizing evolutionary improvements of the force structure held at the end of World War II. The basic maneuver unit was the conventional infantry division, composed of division artillery, three infantry regiments, and the usual support battalions. The minor changes to the infantry regiments in the 1950s were to trade heavy mortars for the cannons in the regimental cannon companies, and to trade 106-millimeter recoilless rifles for antitank guns in the regimental antitank companies. Within the three battalions per infantry regiment, the three rifle companies to one heavy weapons company ratio continued, with evolutionary changes to the composition of the weapons as well as the introduction of French organizational concepts to the "American" basic design, such as antiaircraft platoons in each infantry battalion and similar minor adjustments. The normal type infantry in the French Army of the 1950s serving in Europe would have looked strikingly similar to equivalent American formations of the same period, such as those American units which fought in Korea.

However, simultaneous with the above evolutionary changes and the various adjustments to the normal type units fighting counterrevolutionary campaigns, the French

Army experimented with radically new unit designs. The prime impetus, as with the very similar experiments in the US Army conducted in the mid to late 1950s, was to design small mobile formations which could fight on a battlefield populated with tactical nuclear weapons. This requirement for new organizations able to maneuver on an atomic battlefield was codified within NATO in the 1955 directive entitled "MC 48." For the French, an additional impetus was to develop more mobile formations in response to perceived lessons learned from the 1940 failure of static fortifications and methodical battle. The result was the *Javelot* design.

The Javelot division was designed to be light, powerful, and most especially mobile. 10 Units would be armored, airborne, mechanized, or motorized to ensure mobility. To ensure lightness and battlefield agility, measured by the ability to disperse and mass to avoid nuclear strikes and then strike in their wake, the regiment was changed from a collection of three subordinate battalions to a smaller entity that eliminated the battalion echelon. This unitary regiment was composed of four to six maneuver companies plus other support companies. The regimental headquarters was able to establish small subordinate tactical headquarters to control several of the companies as a sort of provisional battalion. Whether the new infantry regiment was a small regiment or an enlarged battalion was a matter of perspective, but a collection of four or five such regiments constituted the new division. As the armored cavalry branch of the French Army developed the concept, a clear pedigree from French armored and cavalry reconnaissance regiments (which had since 1943 been battalions named regiments rather than battalions for lineage purposes) to the combined arms regiment which was a mechanized infantry formation with light tanks which suggests that the new unitary

regiment was conceived as a large battalion.¹¹ The first divisions established along these lines between 1955 and 1956 were the 7th Light Mechanized Division and the 10th Airborne Division.¹²

The airborne division was composed of veteran units from Indochina and was created by enlarging the returning parachute battalions to the new regimental organization. The division was organized in Algeria and immediately engaged in combat. These veterans, along with the troops in France from the light mechanized division, employed the new design during the 1956 Suez Crisis. 13 Despite the political failings of the Suez operation, the French military accomplished all assigned missions and did so in a tactically impressive manner that left their British allies "blinking with disbelief." ¹⁴ The new style regiments showed they were indeed rather like large battalions, albeit with the size such that they could further sub-divide into two small battalions. The mechanized units were the least effected by these changes as the new regiments were only slightly changed from their predecessors. Overall, the new Javelot designs strongly resembled the contemporary American Pentomic designs; although the fact that the French designs preceded the American designs suggest the French may have performed yeomen work in the initial concept. 15 However, the fact that the French unitary regiments were called regiments instead of battle groups for historical and lineage reasons, and that these organizations saw successful combat in Suez, suggests partial reasons for why the French concept endured while the American concept reverted to more traditional battalion organizations. At any rate, the *Javelot* divisions designed for atomic warfare in Europe departed Suez and deployed to Algeria to become part of the theater's intervention troops. 16

Territorial Organization

The basis of French ground force organization in Algeria, as in previous counterrevolutionary conflicts, was the territorial organization of the theater and of the forces within the theater. Similar to Indochina, Algeria was organized by expanding the historic territorial divisions into corps equivalent organizations. The long French presence in Algeria, and the associated incorporation of Algeria into a part of France rather than just another colony, provided the French Army with a ready solution to theater organization. The political divisions of Algeria were well established and well understood by the military and the French technique of marrying military and political authority in single individuals eased the adoption of the existing political boundaries to those of the military. This system permitted thorough focus on the population as well as the terrain and enemy and the incorporation of specific counterrevolutionary warfare techniques such as civil affairs and psychological operations. Using the doctrinal understanding of their adversary's technique as being "partisan warfare + psychological warfare = revolutionary warfare" the French determined their counterrevolutionary warfare technique would be "broken down into three groups--destructive techniques, politico-psychological techniques, and constructive techniques." The territorial organization of the theater, and of forces within the theater, was not just a continuation of previous practice but a deliberate molding of the military to accomplish these counterrevolutionary tasks.

The territorial organization was designed "to adapt the military organization *exactly* to the civilian administrative establishment." The military organization was:

Algeria was divided politically into three large areas called, in French, *igamie*. Each was about the equivalent of a province in Canada. So there were

three *igamies*, plus the Sahara as an autonomous area. Those large areas were subdivided into departments. We had 15 Algerian departments plus two Saharan departments, each headed by a *prefet*. Each department was subdivided into districts called *arrondissements*, with a *sous-prefet* as the head of each. We had 72 *arrondissements* in Algeria.

There was exactly the same pattern for the military command. The Army corps area corresponded to the *igamie*, divisional zone to the department, and regimental sector to the *arrondissement*. So we had three Army corps areas plus the Sahara command, 15 divisional zones, and 72 regimental sectors. ¹⁹

The regimental sectors were, as in Indochina, occupied by a variable number of infantry battalions as well as specialist units such as civil affairs, local irregulars, intelligence personnel, and sundry service and support units. The basic unit of the sector, though, was the light infantry battalion which was assigned a subsector within which it conducted all three counterrevolutionary tasks described above. As in Indochina, any number of light infantry battalions could be assigned to a sector, although the usual allotment was between one and three. When large ALN units were in their area of operations, these sector troops would provide the sealing forces while higher headquarters mobile forces were deployed to actually combat the ALN. The success of these operations, while largely credited to the mobile forces, belonged equally to the territorial units which often had developed the intelligence, divorced the ALN from the population, and then sealed the ALN into less developed terrain for the elite mobile forces to destroy. As in Indochina, the zonal divisions were not conventional mobile divisions but rather collections of battalions organized within several sectors. For example, the 27th Alpine Division in the mountainous Kabylia Zone included thirty infantry battalions at one time.²⁰

Along the Tunisian and Moroccan borders, additional units were provided to man the barrier system. Engineers built, monitored, and repaired the fence lines. Mechanized units reacted to breach attempts, and field artillery provided fire support. These border forces were an additional asset to the territorial organization, although they were controlled by the zone headquarters. This prevention of third-country support for the ALN was a clear lesson from Indochina where Chinese support to the regular Viet Minh forces may have provided the margin of victory.

Another element of the territorial system was the theater intervention force.

Composed of a corps equivalent force of two airborne and one infantry divisions, this force was responsible for engaging the larger ALN units identified throughout Algeria, as well as reinforcing major breach attempts along the frontiers. The final element of the Army's theater ground organization was the service and support organization. Based on preexisting garrisons, this organization was able to support the large number of combat units with a relative small number of support troops. However, the system was designed for support of a static army, not to support mobile operations above those of the theater intervention force. ²¹

A benefit of the theater territorial organization was that, since it mirrored the political organization, other forces involved in the conflict could be more efficiently integrated with the Army's effort. The air force organized air commands that had boundaries and appropriate forces that overlapped those of the army. ²² This arrangement permitted a system of air force controllers associated with the zones, as well as dedicating air squadrons to a habitual zone. ²³ Also significant was the synergy with the Gendarmerie. By the end of the conflict, each army corps area had a Departmental Gendarmerie Legion of over 2,000 Gendarmes, plus a Mobile Gendarmerie Legion of over 2,500 Gendarmes equipped with armored cars and other military items. ²⁴

The other parts of counterrevolutionary warfare, the politico-psychological and construction tasks, were also accounted in the territorial organization. The psychological warfare bureau from Indochina was expanded to become the Fifth Bureau of the 10th Military Region, with subordinate staff officers down to battalion level. These formed the organizational infrastructure for concerted political and psychological warfare as well as for a special school and indoctrination of all troops. The construction part was provided by a theater-level civil affairs organization known as the Special Administrative Section. Organized into four-man teams with thirty to forty auxiliaries for security, these teams spread all over the country providing traditional colonial administrative, social, and economic assistance to disadvantaged native populations. About 660 teams were ultimately fielded from a total civil affairs personnel strength of 5,000. 25 These teams provided a wide disparity in performance, and were not subordinate to local subsectors. Aside from occasional friction between local commanders and Special Administrative Section teams when the personalities could not cooperate, the Special Administrative Section was eventually disbanded in 1960 due to many of its members being overly politicized, but the assets were provided to the sector staffs in a return to Lyautey's concept of indigenous affairs officers supporting the local commander who was responsible for civil affairs in his area.

The result of this territorial organization combined with the three tasks of counterrevolutionary warfare (destruction, politico-psychological, construction) was the over-arching system called the *quadrillage* (squaring or gridding). The term has roots with counterinsurgency operations during the French Revolutionary Wars, but in Algeria the term connoted the territorial organization, the organization and large numbers of

forces within the territorial organization, and the techniques of counterrevolutionary warfare. ²⁶ The term also implied the constant security provided throughout Algeria, as well as all tasks conducted to combat identified ALN within a particular unit's sector. The territorial organization in Algeria thus drove the overall conduct of the war, rather than being derived to support a particular scheme.

Infantry

As a French infantry battalion commander pointed out, the infantry in the Algeria War "did nine-tenths of the work and suffered nine-tenths of the losses," and "the *quadrillage* of Algeria was assured nine times out of ten by the battalions on foot." While these percentages may be based on anecdotal evidence rather than statistical analysis, his point is valid. The terrain and the nature of the enemy indicated that, as in Indochina, dismounted troops would have to conduct most of the combat as well as provide most of the static security and pacification tasks. The French discovered that their program for victory required a large number of infantry troops, and they were spread between the territorial commands and the mobile reserve using organizations influenced by both the Indochina War and the *Javelot* experiments.

Algeria was divided into fifteen zones with further division into seventy-five sectors. As in Indochina, the European normal type infantry battalion was not utilized in counterinsurgency. These territorial formations were manned by over 200 light infantry battalions evolved from the Far East Pattern of organization used in Indochina. The principal organization type used was the Type 107 infantry battalion which was the predominant organization for troops in the sectors. A light formation with about forty vehicles for internal administration and support, the unit was composed of a headquarters

and support company (with two-weapon sections of mortars, heavy machine guns, and recoilless rifles) and four infantry companies each of a headquarters with one light mortar and four infantry platoons (each with a platoon headquarters, a rocket-launcher team, three "rifle-grenadier" teams, and two light machine-gun teams--which were typically utilized to form two squads each of two or three teams based on the platoon leader's preference and mission requirements). Total assigned strength was 812 personnel. ²⁸ The battalion was also a vehicle for attachment of unique units from the sector, such as animal transport platoons, dog platoons, and reconnaissance and tracker companies composed of native auxiliaries. ²⁹ The Type 107 battalion was therefore a clear evolution from Indochina experience, but with subtle improvements. The weaponry available was improved and, combined with the decreased firepower of the ALN compared to the regular Viet Minh, this resulted in an improved firepower ratio between French sector troops and any enemy they may encounter. Improvements included the replacement of box-fed automatic rifles with belt-fed light machine guns in the rifle platoons, the introduction of rocket launchers to the infantry platoon, and an increase in caliber in the recoilless rifles.

Another improvement in the light infantry battalion was its mobility. French battalions in Algeria were able to range further over the country-side using a variety of means while the foot-bound Indochina battalions were occasionally moved by truck over roads and then forced to walk to no more than ten kilometers of motorized artillery support. The light infantry could walk--and inevitably would have to once within range of the enemy--but could also move or patrol in a variety of motorized vehicles, to include civilian vehicles, the numerous helicopters, bicycles, or even animals.³⁰ As the French

infantry possessed a general firepower advantage over the ALN, and they could count on piston-engined close air support in lieu of artillery for further advantage (see below), mobility became both enabled and was stressed in the Algerian war. A challenge to French commanders was to determine, based on the mission and the assets available, "how to make movements with the proper methods." For the light infantry in the sectors, the usual means was various motorization, which sometimes included trucks with improvised armor, to perform the sealing mission during offensive operations while helicopters delivered the mobile forces for the main effort attack. ³² For routine patrols within the sector, all means of transportation were utilized--often due to availability of assets as much as appropriateness of the method. As the Type 107 battalions lacked organic tactical motorization, operations which required rapid movement were enabled by the centralized zonal logistics units. Trucks in excess of logistics requirements were used for tactical troop movements. As the territorial system used in a developed theater did not have overly extravagant logistics requirements compared to large mechanized attacks planned for NATO, the truck availability could be as high as 57.75 percent of total logistics truck assets being used for tactical rather than logistical movements.³³

The French firepower and mobility advantages were relative to their ALN opponents. The ALN had units organized on a territorial basis into fire teams of five men, squads of two fire teams and a sergeant, platoons of three squads and a small headquarters, companies of three platoons and a small headquarters, and battalions of three companies and a small headquarters for a total of 353 personnel. There was thought of continuing the organizational progression to brigade level, but French action prevented further organizational consolidation and instead forced ALN dispersion. The algorithm of the progression of the prevented further organizational consolidation and instead forced ALN dispersion.

Clearly based on historic French organizational formulas instead of Communist Chinese formulas the Viet Minh used, the ALN could not develop a true conventional military organization. The French, having learned the lesson of Indochina when a third country supplied and organized the regular Viet Minh, took great efforts to ensure the ALN would not repeat the experience. The ALN had difficulty providing arms to their units, and was hampered by the French secret services' covert attacks on international arms suppliers. The frontier barriers prevented the ALN in Tunisian or Moroccan sanctuary from either supplying modern arms to operating forces or to infiltrate significant units of reinforcements. ALN mobility was by foot, animal, or improvised motorization. The only advantage to the ALN was the broken terrain in much of Algeria which provided many hiding places for small units as well as covered movement routes. However, the development of the ALN was slower than that of the French, which was the reverse of what happened in Indochina, so the ALN, rather than continuing to increase the regularization of its forces, instead resorted to dispersion and the employment of small units in limited actions. The French response to this was to further accentuate their firepower and mobility advantages while employing native auxiliaries called harkis as trackers to find the elusive ALN.

While the Type 107 sector units were conducting the *quadrillage* of Algeria and providing support to offensive operations, other French units were either manning the frontiers or performing mobile offensive operations as part of the theater reserve. These units were organized along the *Javelot* principles rather than the light infantry battalion scheme. In March 1959, when there were over 200 infantry battalions in the sectors, there were also twenty-four mechanized battalions and ten paratroop battalions, which in both

cases were called regiments in the *Javelot* Cavalry tradition, and which served as the theater reserve and manned the frontiers. Although the paratroop units were lighter than the mechanized units, they were organized similarly with a headquarters which was capable of fielding up to two tactical headquarters, four companies of infantry, a support company of motorized heavy weapons, and either a light motorized reconnaissance company in the paratroop units or a light tank or armored car company in the mechanized units. ³⁶ A paratroop battalion rated 1271 personnel--459 more than a Type 107 light infantry battalion. ³⁷ The difference in the companies was that the paratroopers were light infantry, organized similarly to the companies in the Type 107 battalions, who moved by helicopter to their operational area, while the mechanized units were mounted on either half-tracks or trucks. Reinforced with armor units and artillery on the frontier, and by piston-engined close air support in all cases, these mobile units provided the French sledge hammer to destroy ALN units identified in either frontier breach attempts or as a result of intelligence developed by the sector troops and their *harkis*.

Mobile Forces

The failure to develop theater mobile forces of sufficient strength to combat the Viet Minh before they could secure battlefield victory was not a scenario to be repeated in Algeria. From 1956, the French had an average of two airborne divisions and one other motorized or mechanized division as a small corps equivalent theater reserve. These forces were used to reinforce the frontiers, to reinforce sectors as in the Battle of Algiers, and to conduct their own operations throughout Algeria where intelligence indicated concentrations of ALN. These divisions were the new-style *Javelot* designs, each with four to five maneuver battalions, an artillery battalion, an armored reconnaissance

battalion, and other support units.³⁸ Additional mobile forces were allocated to sectors – particularly those sectors near the frontiers for breach reaction forces. As the ALN never operated above battalion level, the French superiority in mobile combat ability proved decisive in breaking the ALN's military capability.

The two airborne divisions--the 10th and 25th--each had five paratroop battalions organized as described above along with light support units. The ground mobile division in the reserve--initially the pioneer *Javelot* 7th Rapid Mechanized Division, and later the 11th Motorized Division--was usually composed of two mechanized or motorized battalions, an armor battalion, and an armored cavalry battalion. These fourteen theater reserve mobile troop battalions were supplemented by another twenty-two mechanized or motorized infantry battalions and thirty-five armored or armored cavalry battalions along the frontiers. Total mobile force maneuver battalions in March 1959 were therefore seventy-one battalion equivalents compared to the 203 light infantry battalions on *quadrillage* duty. As the terrain permitted motorized and mechanized movement, the mobility and firepower of these mobile forces was greater than what the French had fielded in Indochina and greater than their ALN opponents.

The large battalions--often broken into two mini-battalions through the use of their two tactical headquarters, provided the French airborne divisions with about two-thirds of the infantry of a similar formation in Indochina. However, their internal design for rapid maneuver with minimal supporting artillery was ideal for the Algerian war. Ironically, the *Javelots* were designed for European nuclear war. French military defense of the 1950s was evolving to a "shield and javelin" theory, and the *Javelot* division was, like its American Pentomic counterpart, the ground force balance to the nuclear-armed air

force as the counterattack force to Soviet aggression. ⁴⁰ As a result of a number of deficiencies beyond the prevue of this thesis, the concept of divisions organized with four or five large battalions did not maintain its temporary global military fashion beyond the early 1960s, except in France. The tactical success of these large battalions in Suez and Algeria, combined with a post-Algerian War reliance on nuclear deterrence, kept the large-battalion regiment in the French Army through the end of the Cold War and into the recent reorganization of the French Army. The success of these organizations in Algeria can be partly explained by the fact they were manned with the cream of the French Army of the period--to include numerous veterans of Indochina. However, that they were designed for speed of operational maneuver--at the cost of the ability to cover ground, employ great firepower, or be sustained for long periods of time logistically -was ideal for the situation in Algeria. French infantry with close-air support had firepower superiority over the ALN and did not need great artillery support, had no air threat, had the sector troops to cover the ground, and could rely on zonal logistical support. Their operational mobility was thus their greatest asset, especially when combined with the large scale employment of helicopters.

Fielding new American and French helicopters, the French could conduct air assaults of up to two battalions at a time in most areas of Algeria. Additionally, they had recourse to parachute insertion, as well as motorized insertion of troops with organic or zonal transportation. However, the use of the helicopter, while dwarfed by truck employment in gross numbers, is what gave an advantage to the French. A typical clearing operation would see the tightly synchronized movement of sector troops by truck and foot to cordon an area while paratroop battalions were inserted by helicopter close to

the supposed ALN target. The entire operation would have been closely supported by piston-engined close air support and even armed helicopters. ⁴¹ The penultimate French offensive occurred in 1959. Called the Challe Offensive after French General Maurice Challe, it saw this basic operation conducted throughout Algeria systematically until no ALN unit above platoon size operated inside Algeria's borders. Border breach attempts had, by this time, been discontinued after the many bloody defeats at the hands of the mechanized infantry, armor, and artillery stationed behind the border barriers.

Fire Support

Aside from the limited mortar support organic to the infantry, and to some light artillery which accompanied the mobile troops, French fire support in Algeria was divided into artillery in support of the border barriers and close air support. The border barriers were mainly wire fences reinforced with electronic detection devices and mobile patrols. The point of the barrier system was less to bar entry to Algeria than to detect entry. Once detected, mobile troops would drive to the breach and destroy the ALN infiltrators. These mobile troops were reinforced with light field artillery-mostly 105millimeter but also occasionally 155-millimeter--which had great effect when the ALN attempted to infiltrate battalion-sized units. In these occasions, the size of the ALN unit and the fact that they had to mass in order to squeeze through a breach meant this was one of the few areas where profitable artillery targets were presented. The limited employment options for field artillery meant that in March 1959 there were only thirtysix French artillery battalions in Algeria. Even this number is more indicative of the large amount of frontier ground that had to be covered than to the actual concentrated firepower required.

The most omnipresent fire support for the French came from the air. The French air force dedicated air support parties and liaison to every sector and dedicated an on call squadron of piston-engine fighter-bombers for each division or zone. For heavier support, such as during commitment of the theater reserve, there were also squadrons of piston-engine medium bombers. To maintain constant surveillance as well as joint firepower control, the Indochina innovation of using light observation planes was utilized and each division or zone had six such planes assigned. When added to the innovative use of armed helicopters, the combined aerial armada provided devastating support for French ground forces and freed the French from the ten kilometer road tether they had in Indochina.

As a measure of the scale of French air support, by January 1959 the Algeria air picture was composed of the following:

130 jet fighters (deployed for air defense of Algeria, but never tested); Twenty-two B-26 medium bombers plus eight RB-26 reconnaissance planes; Sixty-one multiengine transport planes suitable for parachute operations (one to two battalion lift capability);

308 light attack aircraft, mostly armed T-6 piston-engine planes (These were the primary air weapons of the war);

258 helicopters from the army, navy, and air force; of all types;

178 light liaison and observation planes from the army and air force. 43

Other than the little-used jets, these planes were all light, piston-engine, capable of visual reconnaissance, and simple to operate. They were also able to operate from austere airfields and were easily maintained and supported. They proved to be ideal for the many small battles between small French patrols and their ALN opponents, as well as for maintaining constant surveillance over much territory. They were also peculiarly suitable for the desert areas of Algeria, as trained pilots of low and slow airplanes could actually track ALN by watching patterns in the sand.⁴⁴

Indigenous Personnel

Algeria of the 1950s had two distinct populations--the European colonists and the native Muslims. The Muslim population was further divided between Arabs and Berbers. The Europeans were fully integrated into French society, and they could join the regular French military as well as join local *Zouave* units in Algeria. However, in this thesis indigenous refers to the Muslim population since they were the disenfranchised people who jointed the FLN.

As Algeria was considered legally a part of France, the Algerian Rifles and *Spahis* cavalry continued service in the French Army--to include active service in Algeria--right up to independence. As well as these soldiers, the security services also employed several additional organizations to use Muslim personnel in the war against the FLN. The police forces formed mobile rural protection groups, which were company-sized paramilitary security forces. Tribal villages--especially the Berbers who were often more loyal to France than the Arab population--were formed into self-defense militias in an evolution of similar developments in Indochina. These self-defense militias were incorporated into the *quadrillage* system and were integrated into the security system established by the nearby Type 107 light infantry battalion. The French Special Administrative Section employed so-called *Maghzen* auxiliaries for security as well as additional expertise in local affairs. The last element of indigenous employment was the military auxiliaries, the *harkis*. ⁴⁵

Auxiliaries had been employed in Indochina from battalion level up to theater level. However, in Algeria a greater regimentation in their use was enforced and most *harkis* were employed in *Commandos de Chasse* (tracker units) with French cadre and

Muslim auxiliaries. These units were of variable size and assigned to Type 107 battalions for local patrolling. Also, twelve *Commandos de Chasse* were assigned directly to the theater headquarters for long-range, long-term patrolling. Often employing turned ALN personnel, some of these *Commandos de Chasse* operated without any French personnel. Their hallmark was being able to operate identically to the ALN they hunted--and at times even disguising themselves as ALN to penetrate their opponent's networks. Not all *harkis* were employed in such dramatic roles and many were used for local security. Nevertheless, it appears that indigenous personnel were utilized much more effectively in Algeria than in Indochina. In early 1959, the French employed 28,000 *harkis*, 17,000 *Maghzens*, 16,800 self-defense militia, and 8,600 mobile rural protection police. An estimated 200,000 Muslims actively joined security units, which may not be surprising given that about 640,000 Muslim veterans of the French armies of both world wars were still alive during the late 1950s. 46

One significant difference between Indochina and Algeria was the deployment of French conscripts and reservists to Algeria. The implication for indigenous personnel was that French units did not take first pick of native personnel to fill their own ranks, but would rather use them for the *harkis*. The other significant difference between the two conflicts was that, since France did not claim to be establishing an independent Algeria, there was no drain to create an Army of Algeria as there had been with the creation of the Army of Vietnam. Loyal Algerians still joined their traditional regiments, while demobilized personnel often served as normal reservists. The quality of Muslims in French service was thus more even than that of Indochinese in the prior war.

Conclusions from the Algerian War

The negative reaction of many soldiers in the French Army to the announcement of Algerian independence came about because they believed that they had won the war. French soldiers had achieved a military victory over their ALN opponents. The military lessons of their operations are therefore worthy of consideration.

The French experience in Algeria confirmed the lessons of Indochina. The Algerian theater was organized along a territorial basis and then sufficient troops were deployed to conduct the quadrillage. Psychological warfare specialists were provided throughout the force, and specialists in civil affairs were deployed initially as a separate force and then integrated into the territorial units. French infantry possessed both firepower and mobility and, whether they were light infantry in the sectors or the elite intervention troops, they could outshoot their opponents. Using organizational designs developed for atomic war as well as large helicopter and truck parks, the mobile reserve of the theater was capable of rapid offensive actions throughout Algeria. The infantry were freed from their ten kilometer tether to the roads by relying on 300 piston-engined airplanes for fire support. Finally, indigenous personnel were effectively employed and native Muslims were used as reconnaissance and tracker troops as well as an augmentation to local security efforts. These organizational concepts were refinements of French concepts that had colonial roots as well as modern experience in Indochina. The French did not face an Algerian equivalent to the Viet Minh regulars, which is a testament to their learning from Indochina that the optimum time to have defeated the Viet Minh was before the Chinese intervention. The French managed to seal the borders with Tunisia and Morocco while launching the mobile forces into any identified ALN

base area within Algeria. These lessons, while no longer necessary in French doctrine once Algeria was given independence, were summarized by certain French veterans immediately after the war, and bear consideration for continued applicability..

¹A. H Peterson, G. C. Reinhardt, and E. E. Conger, eds., *Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: The Algerian War*, 8.

²Ibid., 1.

³Ibid., 2.

⁴Nowfel Leulliot and Danny O'Hara, "Indo 1945-1954, From Haiphong ot Dien Bien Phu."

⁵A. H. Peterson, G. C. Reinhardt, and E. E. Conger, eds., *Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: The Algerian War*, 6. General Ezanno provided this four-phase model of the war in the symposium which is adapted in this thesis.

⁶Ibid., 6-7.

⁷Ibid., 7; and Constantin Melnik, *The French Campaign Against the FLN* (Santa Monica, CA: The RAND Corporation, 1967), 11.

⁸David, "Deux theatres, un meme conflit? Le poids de l'Union française sur l'integration atlantique 1952-1956," 22-23.

⁹English and Gudmundsson, *On Infantry*, rev. ed., 171-172.

¹⁰Peter G. Tsouvas, *Changing Orders, The Evolution of the World's Armies, 1945 to the Present* (New York, NY: Facts on File, 1994), 29.

¹¹Lieutenant-Colonel Argoud, "The Armored Arm in the Atomic Age," *Military Review* 36, no. 10 (June 1957): 90-94.

¹²Ibid., 32.

¹³Andre Beaufre, *The Suez Expedition 1956* (New York, NY: Frederick A. Praeger, Inc., Publishers, 1969), describes the operation from the perspective of the French Commanding General.

¹⁴Porch, *The French Foreign Legion*, 579.

¹⁵US Army Command and General Staff College, *ST 7-100-1 Infantry Division* (Fort Leavenworth, KS: US Army Command and General Staff College, 1959), provides the entire pentomic division organization to include subordinate units and their operational procedures.

¹⁶Tsouvas, Changing Orders, The Evolution of the World's Armies, 1945 to the Present, 32.

¹⁷Paret, French Revolutionary Warfare from Indochina to Algeria, 10, 32.

¹⁸A. H. Peterson, G. C. Reinhardt, and E. E. Conger, eds., *Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: The Algerian War*, 12. Emphasis added. General A. Giroult provided the ground force information in this symposium.

¹⁹Ibid., 12.

²⁰Ibid., 13.

²¹Ibid., 13.

²²Ibid., 16-17. Colonel J. Mitterrand provided the air force organization in the symposium.

²³Colonel Victor J. Croizat, "The Algerian War," *Marine Corps Gazette* (December 1957): 44-51.

²⁴Jacques Fremeauz, "La Gendarmerie en guerre d'Algerie," Revue Historique Des Armees 4 (2002): 8-11. The French Gendarmerie belongs to the Defense Ministry, and they are a paramilitary police organization with both civilian law enforcement and traditional military duties – analogous to the status of the US Coast Guard. Departmental Gendarmes can be considered equivalent to US State Police, while Mobile Gendarmes are similar to US Army military police. The Gendarmerie also provides *Prevote* detachments to military units analogous to US Army divisional military police to conduct traditional military police law enforcement tasks, but these units are not counted in this description.

²⁵Beckett, Modern Usurgencies and Counter-Insurgencies. Guerrillas and their Opponents since 1750, 164.

²⁶Caldwell, 147; and Thomas Carlyle, *The French Revolution: A History*, [Book on-line]; available from http://www.classicauthors.net/Carlyle/FrenchRevolution/ FrenchRevolution154.html; Internet, "Likewise, General Hoche has even succeeded in pacifying La Vendee. Taking Movable Columns, ... gridding-in the Country; pardoning the submissive, cutting down the resistive, limb after limb of the Revolt is brought under. ...the frightful gangrene of La Vendee seems veritably extirpated. It has cost, as they reckon in round numbers, the lives of a Hundred Thousand fellow-mortals;

...This is the La Vendee War. (Histoire de la Guerre de la Vendee, par M. le Comte de Vauban, Memoires de Madame de la Rochejacquelin, &c.)."

²⁷Jean Pouget, Bataillon RAS (Paris: Edition Presse de la Cite, 1982), 376.

²⁸Jean Mabire, Commando de Chasse (Paris: Edition Presse Pocket, 1978), Table: "Bataillon D'Infanterie – Type Afrique du Nord dit "107"

²⁹Frederic Medard, "Le Soutien de l'armee française pendant la guerre d'Algerie 1954-1962," Revue Historique Des Armees 4 (2002): 27; and Thierry Noulens, "L'utilisation des chiens militaries pendant la guerre d'Algerie," Revue Historique Des Armees 4 (2002): 40; and Mabire, Commando de Chasse, Table: "Bataillon D'Infanterie – Type Afrique du Nord dit "107"

 $^{^{30}\}mathrm{Medard},$ "Le Soutien de l'armee française pendant la guerre d'Algerie 1954-1962." 27.

³¹Ibid., 26.

³²Ibid., 29.

³³Ibid., 27.

³⁴Charles R Shrader, *The First Helicopter War: Logistics and Mobility in Algeria,* 1954-1962 (Westport, CT: Praeger, 1999), 154-155.

³⁵Ibid., 155.

³⁶Argoud, "The Armored Arm in the Atomic Age," 93-94; and Martin Windrow and Wayne Braby, *French Foreign Legion Paratroops* (London, Osprey, 1985), 20; and Yves Debay and Alan McKay, *French Foreign Legion Paratroopers* (Paris: Histoire et Collections, 2002), 20-22.

³⁷Morvan, "2eme Regiment Etranger de Parachutistes;" and Martin Windrow, *The Algerian War 1954-1962* (London: Osprey, 1997), 24.

³⁸Tsouvas, Changing Orders, The Evolution of the World's Armies, 1945 to the Present, 32.

³⁹Argoud, "The Armored Arm in the Atomic Age," 93-94; and Windrow, *The Algerian War 1954-1962*, 33.

⁴⁰Marshal A. Juin, "National Defense and Military Resources," *Military Review* 37, No. 9 (December 1957): 73-76.

⁴¹A. H. Peterson, G. C. Reinhardt, and E. E. Conger, eds., *Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: The Algerian War*, 35-37.

⁴²Croizat, "The Algerian War," 44-51

⁴³A. H. Peterson, G. C. Reinhardt, and E. E. Conger, eds., *Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: The Algerian War*, 21.

⁴⁴Ibid., 32-34.

⁴⁵Christophe Cazorla, "Concept d'emploi et evolution statutaire des suppletifs Durant la guerre d'Algerie," Revue Historique Des Armees 4 (2002): 75.

⁴⁶A. H. Peterson, G. C. Reinhardt, and E. E. Conger, eds., *Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: The Algerian War*, 7.

CHAPTER 5

CONCLUSIONS AND RECOMENDATIONS

Contrary to some opinions, the Army had not devised a new and radical theory for fighting revolutionary wars. The unconventional tactics that General Challe used so successfully were often due to on-the-spot improvisations and to some of the lessons learned in Indochina.¹

The very originality of the Challe Plan thus lay in the distribution of his forces into two large specialized masses: the so-called *quadrillage* forces and the so-called "intervention" forces.²

Constantin Melnik, The French Campaign against the FLN

The French developed ground force organization models adapted to conduct counterrevolutionary warfare between 1945 and 1962. These models were evolutionary developments of traditional French colonial warfare constructs, refined by modern technology and the changed nature of real and potential opponents. These models were geared towards the territorial organization of the theater, supported by tailored subordinate organizations. By the end of the war in Algeria, these models could be inferred as effective, as the operational concepts they intrinsically supported had shown military success.

France withdrew from Algeria after having largely attained military success. The reasons for this are complicated, but for the purposes of this thesis it is enough to know that a belief of the inevitability of Algerian independence, combined with a desire to emphasize leadership in Europe with concurrent nuclear deterrence capability, compelled French President Charles de Gaulle to grant Algerian independence. With this decision, the final impetus for France to possess large, manpower-intensive, counterrevolutionary warfare organizations evaporated. France's successful counterrevolutionary war in

Algeria would prove to be its last on such a scale. The resultant mutiny of disaffected elite French soldiers, and their subsequent terrorist campaign against the Fifth Republic, only soured the French public against counterrevolutionary warfare. Rumors (later substantiated) of brutal interrogation tactics deemed tactically necessary in counterrevolutionary warfare, too, did not sit well in a nation that had endured Nazi occupation within living memory. The French Army turned to an independent deterrence force militarily if not politically separated from NATO, with both conventional and nuclear capabilities, as well as smaller intervention forces for the minor remnants of the Empire. These remaining forces all derived organizationally from the *Javelot* experiments of the 1950s as well as the intervention corps in Algeria, while the mass infantry formations of Indochina and Algeria were demobilized. The French Army remains to this day organized at the battalion and regimental levels along broadly similar lines to the *Javelot* type units.

If France no longer required its hard-won counterrevolutionary warfare organizational models, others still did. For a brief period before full American involvement in Vietnam, there was a limited role for experts such as Roger Trinquier and David Galula to expound upon counterrevolutionary warfare operations and techniques. Throughout their descriptions of "how to" fight insurgents in, respectively, *Modern Warfare* and *Counterinsurgency Warfare Theory and Practice*, the organizational models described in this thesis are completely ingrained in the suggested concepts of operations. Through such works, the enduring outline of French counterrevolutionary warfare models remains despite the demobilization of the actual French assets.

Territorial Organization

The single most critical element of French counterrevolutionary warfare design is the territorial organization of forces within the theater of operations. Importantly, the territorial organization ought to be tied to the political organization rather than to traditional conventional boundaries such as terrain features or mobility corridors. This scheme accords with the understanding that the population is a focus of operations in this kind of war. Galula describes four laws of counterrevolutionary warfare, the first and second of which ("support of the population is necessary for both the counterinsurgent and the insurgent" and "intensity of efforts and vastness of means are essential") directly correspond to territorial organization as well as the manpower implications this organization entails. ⁵ Galula also describes an eight step process of operations within the ubiquitous *quadrillage* and also emphasizes the "primacy of the territorial command." Trinquier describes this organization as comprising two sub-types of *quadrillage* forcespolice type forces for "gridding" within populated areas and "inter zone" forces for patrols outside population areas.

The ramification of the French territorial organizational concept is that "grid" troops oriented on the population must be arrayed along political and demographic lines. For example, a hypothetical nation comprised of eighteen provinces might call for a theater command with three division equivalent zone commands and eighteen brigade or regiment equivalent sector commands. Within the sectors could be a variable number of subordinate combat, civil affairs, psychological operations, and other troops depending on the insurgent threat and other local needs. Sector boundaries would remain basically permanent, but subunits could be allocated in accordance with changing circumstances.

Sectors located along borders with potential sponsoring nations of the insurgents would also require the assets to seal those borders--to include physical barriers as well as mobile troops and fire support. All counterinsurgent efforts--military, police, intelligence, civil affairs, and so forth--would revolve around a common sector organization to permit unity of effort, common situational understanding, and intimate coordination.

A critical lesson of the French experience with territorial organizations is the organization of psychological operations and civil affairs personnel. The French obtained great results from placing psychological warfare specialists on staffs down to battalion level as well as conducting training of all personnel on political and psychological aspects of the campaign. Civil affairs were not satisfactorily organized until 1960, when the separate and politicized Special Administrative Section was disbanded and incorporated into sector commands on the approximate ratio of eight to ten teams per sector. This highlighted the enduring applicability of Lyautey's indigenous affairs officers. Essentially a combination of US Army's civil affairs personnel and foreign area officers, these teams were intended to comprise area specialists who could mingle with the native population and provide a wide range of social, economic, and administrative services while keeping to the psycho-political objectives. Also, under the Lyautey scheme these indigenous affairs officers worked directly for the local territorial commander rather than for a distant central headquarters because the local commander was ultimately responsible in his area of operations.

The final consideration of the territorial organization is the allocation of resources to seal the borders of the relevant country against external sources of support. In Indochina, the French sought to conduct an economy of force operation by sealing merely

the de Lattre Line around the northern delta region rather than attempting to seal the border with China. In Algeria, great effort was expended to construct and defend the borders with Tunisia and Morocco. Combined with other efforts to interdict international arms trafficking, these efforts helped isolate ALN units within Algeria from support or reinforcement. The French had learned that it is ultimately required to separate insurgents from any external support lest their numbers, equipment, and training permit them to increase to a phase three threat in the Maoist tradition.

Infantry

The French experience with counterrevolutionary warfare indicates the primacy of the infantry. This may be described as a function of the insurgent enemy, who will utilize restricted terrain to counter advanced weaponry, as well as a function of the centrality of the population which indicates requirements for discriminate force as well as contact with the population. In both Indochina and Algeria, French infantry was ultimately counted in the hundreds of battalions, a sobering comment on the manpower implications when facing insurgent forces numbering in the tens to hundreds of thousands and developing semiconventional formations of their own. A savings in manpower, though, is derived from the lessening of requirements for some other arms and services, as seen in the reduction of the ratio of artillery in Algeria as well as the pressing of service support units as provisional infantry units.⁸

A lesson of Indochina was that hundreds of infantry battalions were not sufficient if they lacked requisite combat power. While morale of nonEuropean troops, lack of personnel, and shortages of cadre contributed to French tactical difficulties with their infantry in Indochina, so did their infantry organization. ⁹ As discussed in chapter 3, the

rifle based French infantry small units were at a firepower disadvantage against the automatic weapons based Viet Minh regulars. This resulted in the frequent charge against the French that they were road bound, since they were tethered to within ten kilometers of any road capable of supporting artillery displacement. Novices might believe that the usual manpower advantage of the counterinsurgent force vis-à-vis their insurgent opponents automatically confers combat advantage. In fact, this is rarely the case, since the counterinsurgent is tasked with securing as much of the infrastructure and populace as possible, while the insurgent has no such obligation and can choose where to fight. Also, the counterinsurgent force must actually be victorious while the insurgent must merely survive to have a chance to ultimately succeed politically. The result for the infantry is that, at the point of contact, the odds are often even. The lesson for the French in Indochina was that infantry small units must be able to defeat their opponents in the initial contact--they cannot wait for supporting artillery. However, if they can gain fire superiority, then the greater assets of the conventional army can be brought to bear as in Algeria.

The French improved their infantry in Algeria in two ways. For one, they increased the firepower within their infantry organizations by changing the automatic rifle within the platoons to light machine guns. The title on the organizational chart remained the same, but the weapon was a change in type rather than simply an improvement on the automatic rifle. The other improvement was at a level higher than the infantry battalion, as French strategy sought, successfully, to deny the FLN the ability to copy the Viet Minh creation of a competent regular force. The frontier barriers and secret service actions against arms suppliers ensured the FLN did not develop forces

capable of standing up to the strengthened French infantry. This permitted the sector troops to pin insurgent units, while the elite intervention troops were able to close with and destroy entrapped elements.

In terms of the internal organization of the infantry, there emerged two types. The majority of infantry units were geared to the sectors, and they took the pattern in both Indochina and Algeria of light infantry battalions. Indeed, Trinquier expressly recommends an organization resembling the Type 107 battalion for this duty. 10 The Type 107 battalion was a direct descendant of the Far East Pattern infantry battalion organization, with improvements in weaponry and in the formalization of an auxiliary company called a Commando de Chasse composed of harkis, as well as a continued limitation of heavy weapons such as only two 81-millimeter mortars. 11 Despite a seeming satisfaction with this organization, at least one battalion commander suggested further refinement. Specifically, further evolution of the light infantry battalion was suggested as eliminating one of the four rifle companies but increasing the personnel in the remaining three to ensure continued capability when at reduced strength, and the addition of platoons of intelligence, psychological operations, propaganda, and additional harkis authorizations. 12 The ability to operate on foot, as well as by any variety of additional mobility such as helicopters or trucks was considered essential for these troops by Trinquier and others. 13 The post-1962 elimination of successor organizations to the Type 107 battalions was the result of France's changed military requirements, which did not envision large overseas counterinsurgency operations, rather than the result of any internal failure of the light infantry battalions.

That the French Army after Algeria eliminated all of the hundreds of light infantry Type 107 battalions, but retained organizations evolved from the *Javelot* and intervention units, is indicative that these mobile combined arms units designed for conventional conflict were also adept at the close combat involved with eliminating identified insurgent units which had been discovered by *harkis* and pinned by sector troops. The infantry of these units in Algeria, principally paratroopers but also motorized and mechanized infantry of the Foreign Legion and other regiments, was organized similarly to the sector troops up to company level. However, they were combined in large battalions called regiments that had much more combat support than what was resident in the light infantry battalions, as well as organic mobility rather than mobility borrowed from logistics units. The French Army today is still organized at the tactical level similarly to the intervention troops of Algeria. ¹⁴

The enduring ramifications of the French counterrevolutionary warfare organizational model are that large numbers of infantry are required to serve as sector troops. They need to be light so as to be mobile, by a variety of means, but the quest for lightness must not compromise their combat ability in close combat against the insurgents. The sector troops also need appropriate tailoring in terms of civil affairs, psychological operations, and local personnel to permit their unconventional operations to proceed efficiently. The intervention troops need not be greatly reorganized from their conventional mode, as their employment will be largely in combat and less in the mundane security and pacification operations which occupy much of the time of the sector troops.

Mobile Forces

If the primary organizing principle of counterrevolutionary warfare was the territorial organization, the enabler of this deliberate and manpower-intensive scheme was a mobile force to destroy any concentrated enemy force. Trinquier expressly recommends a multidivision corps of intervention troops for his hypothetical theater of operations, plus additional units of local reserves. ¹⁵ This organization is directly related to the intervention corps employed in Algeria, which was an evolution of the still-born battle corps proposed in the Navarre Plan for Indochina. This force was an amalgamation of the various mobile groups initially formed to counter the emerging Viet Minh regular force threat, but which were themselves developments of the traditional colonial mobile column. The concept of the mobile column can be traced to earlier French campaigns, as

Gallieni had already differentiated between "immediate action" as undertaken by the mobile forces, and the more deliberate action entrusted to territorial formations. "Immediate action is the exception; it is characterized by the operation of military columns, it should only be undertaken against clearly identified objectives, where a show of force is necessary, force being inherent in columns."

The size and capability of the intervention force will be related to the scale of the insurgent enemy, but some guidelines from the French experience are discernable. First, the intervention force must be developed ahead of the corresponding insurgent regular force. The French failed this in Indochina, where the Viet Minh coalesced into a multidivision force while the French were still operating at the regimental equivalent mobile group level. In Algeria, the French had three divisions which were able to systematically destroy the separate battalions of the ALN. Second, the intervention troops constitute a concentrated source of strength for the counterinsurgent force. They usually comprise the cream of the army, and their operations necessitate concentration with the

consequent possibility of a significant defeat. The example of this lesson is Dien Bien Phu, where 4 percent of the total French ground force was lost, but this constituted nearly all the parachute battalions and a substantial slice of the Foreign Legion. So employment of the intervention troops should be in overwhelming strength, as in a war for the support of a population the defeat of the intervention troops may have great second and thirdorder effects. By developing ahead of the ALN, sealing the international borders of sponsoring powers, and intercepting international arms shipments, the French were able to prevent such a disaster from occurring in Algeria. Finally, the intervention troops require great mobility in order to deploy large formations across a theater of operations rapidly enough to surprise the enemy. The use of airborne forces in Indochina and the pioneering employment of helicopters in Algeria demonstrated French adherence to this point, but also indicative of the lesson were the use of motorized forces along the frontiers of Algeria as well as the fact that, once deployed, the intervention troops utilized foot mobility to maintain contact once gained. It is therefore axiomatic that mobility is essential to the mobile troops.

Fire Support

Even when infantry possess organic fire power superior to their opponents, counterrevolutionary warfare requires external fire support. The power of modern weapons means that even small numbers of lightly armed insurgents can, with skill and luck, create havoc. Survivors of an initial fire fight in infantry combat will often go to ground and, at that point, become quite difficult to defeat or destroy without fire power additional to what the infantry can carry with them. In Indochina, this fire support was provided by artillery. The deficiencies of this practice were noted in chapter 3. However,

the French developed techniques of close air support and joint fire power coordination via light observation airplanes that were refined in Algeria and that permitted the French infantry to follow the ALN without regard to the road network. An air fleet of over three hundred piston-engined close air support craft supported the French infantry in Algeria, while artillery was employed along the frontiers at concentrated targets. There were some disadvantages to the reliance on air support in Algeria, such as limitations on night and adverse weather capabilities, but given the relative capabilities of the ALN these did not materially affect the outcome.

The ramifications from the French experience of organizing fire support are not merely tied to the technological tools, since these will be relative to the tools available and the nature of the opponent, as well as the terrain. The primary organizing principles are that the fire support organization must be responsive, agile, and destructive. By responsive, the criteria is that fire support must be able to be employed quickly, since contact may be unexpected as well as fleeting. This is enabled not only by technology such as airplanes on strip alert, advanced communications means, or artillery within range, but by having a system that can coordinate the fire support quickly. The French employed airborne fire controllers as well as coordination agencies at all levels of command. In Algeria, air support could be requested and every echelon from theater down to sector would be simultaneously aware due to all being on the same radio net. 17 By agile, the criteria is that fire support must be able to mass wherever required. This criteria is differentiated from responsiveness in that responsiveness indicates how quickly fire support may be had, while agility indicates how much can be had. With close air support in Algeria, two airplanes could drop a few thousand pounds of bombs on a target, which was usually sufficient and capable of being reinforced rapidly by additional aircraft. In Indochina, artillery was often spread in two-gun increments which, while responsive, could not mass fires to great effect or be reinforced and were in fact used for "psychological fires." Lastly, destructive, implies that the fire support is adequate in its physical effect upon the enemy. Against troops in the open, light artillery in Indochina was devastating however, against troops in field fortifications it was less useful. In Algeria, the ALN was often caught on the move and their lack of cover combined with the power of heavy air-delivered ordnance proved sufficiently devastating to meet the destructive criteria.

<u>Indigenous Personnel</u>

The use of indigenous personnel is the most situational variable aspect of the French counterrevolutionary warfare model. France had a long tradition of utilizing indigenous personnel, and continued this tradition after 1945. The French incorporated natives directly into French regular units in Indochina; they developed new Vietnamese, Laotian, and Cambodian armies from scratch; and they utilized commando tracking units in Indochina and Algeria. In both wars, the French used auxiliary personnel to provide additional manpower and to provide French units with local knowledge as interpreters and guides. In Algeria, the French employed *harkis* to track and hunt the ALN for later elimination by intervention troops. In both conflicts, effective use was made of turned enemy personnel, whose value was not only in their knowledge of the enemy but in their own knowledge that they could never go back. As described by Constantin Melnik, the French use of what they called blued personnel was a key technique of gaining intelligence. ¹⁹ The fact that the population is a center of gravity in these conflicts

indicates that effective utilization of indigenous personnel is a sign of, and way to obtain, such support. Also, utilization of indigenous personnel is a crafty method to deny those same personnel to the insurgent force. Counterintelligence is a significant consideration, as the Viet Minh managed to infiltrate agents repeatedly into the French services.

From an organizational point of view, several key points endure from the French experience. First, every battalion of sector troops requires some indigenous augmentation for guides, interpreters, and local knowledge. Second, the theater should form some number of personnel into units capable of gaining intelligence on the insurgent enemy. These intelligence organizations may take the form of covert infiltration as recommended in Indochina, or of long range tracking and patrol units as used in Algeria. ²⁰ In both conflicts, the tactic of disguising these units as the enemy was also effectively realized. ²¹ Next, some sort of indigenous security force will need to be created for the ultimate withdrawal of any external or foreign counterinsurgent force. The obvious example of this idea is the creation of the three national armies in Indochina, but an analogous example is lacking from Algeria since Algeria was notionally a part of France and Algerian units were in fact part of the French Army. Finally, sector troop commitment can be lessoned, and local population loyalty tested, by organizing self-defense militias in relatively pacified areas.

Conclusion

The French developed ground force organization models adapted to conduct counterrevolutionary warfare between 1945 and 1962 based on their traditional colonial war fighting concepts and refined by technology and evolved opponents. These models were geared towards the territorial organization of the theater, supported by subordinate

tailored organizations. These organizational concepts supported French operational theories of how to fight insurgents--the *quadrillage*, the sealing of borders, the use of mobile columns, and the formulas created to describe revolutionary warfare-and in turn defined how the French were able to conduct such operations. These organizational constructs possess enduring interest to those considering current and future counterinsurgent operations. While one might disagree with the Jominian idea that all war may be reduced to formula, the French concepts of territorial organization for counterinsurgency and the related force structures to support such operations are worthy of continued study and possibly considered emulation.

¹Melnik, *The French Campaign Against the FLN*, V. Melnik was a staff officer to Michel Debre, who was the first Prime Minister under Charles de Gaulle's Fifth Republic.

²Ibid., 40.

³Ibid., 2-3.

⁴Trinquier, *Modern Warfare*, 20-25 discusses the issue of interrogation. While Trinquier's position on the matter is disparaged by academics such as Peter Paret in *French Revolutionary Warfare from Indochina to Algeria*, his views have the benefit of coming from a combatant experienced in actual combat rather than of a disengaged European. Melnik in *The French Campaign Against the FLN* provides more organizational details on the procedures for interrogation, turning (or "blueing"), and execution of prisoners, especially pages 58-62. More lurid details may be found throughout General Paul Aussaresses, *The Battle of the Casbah, Terrorism and Counter-Terrorism in Algeria 1955-1957* (New York, NY: Enigma Books, 2002).

⁵David Galula, *Counterinsurgency Warfare: Theory and Practice* (New York, NY: Frederick A. Praeger, Publisher, 1964), 74-75, 79.

⁶Ibid., 80, 93.

⁷Trinquier, *Modern Warfare*, 72-77.

⁸Shrader, *The First Helicopter War: Logistics and Mobility in Algeria*, 1954-1962, Table 4.1 Units of the Train in Algeria, January, 1960, 105.

⁹Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 196-205.

¹⁰Trinquier, *Modern Warfare*, 76.

¹¹Mabire, Commando de Chasse, Table: "Bataillon D'Infanterie – Type Afrique du Nord dit "107"

¹²Pouget, *Bataillon RAS*, 376.

¹³Trinquier, *Modern Warfare*, 76.

¹⁴Debay and McKay, French Foreign Legion Paratroopers, 116-117; and Ministere de la Defense, [Report on-line]; available from http://www.defense.gouv.fr/sites/ terre/decouverte/ presentation_de_l_armee_de_terre/ organisation_et_localisation_des_unites/chaine_des_forces/la_chaine_des_forces; Internet.

¹⁵Trinquier, *Modern Warfare*, 80-93.

¹⁶Croizot, A Translation from the French: Lessons of the War in Indochina, vol. 2, 94.

¹⁷A. H. Peterson, G. C. Reinhardt, and E. E. Conger, eds., *Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: The Algerian War.* 74.

¹⁸Croizat, A Translation From the French: Lessons of the War in Indochina, vol. 2, 283.

¹⁹Melnik, 32-33.

²⁰Ibid., 243.

²¹Melnik, 40; and Pissardy, *Commandos Nord-Vietnam 1951-1954*, includes numerous photographs of French and Indochinese troops wearing Viet Minh uniforms while on operation.

APPENDIX A

SAMPLE THEATER GROUND FORCES ORGANIZATIONAL CHARTS

Indochina Theater 1939

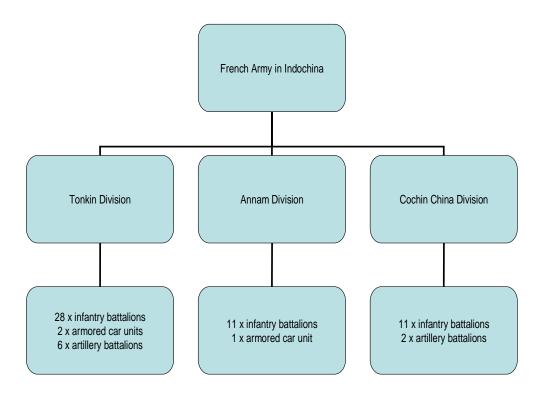


Figure 1. Indochina Theater, 1939

French Expeditionary Corps October 1945 French Far East **Expeditionary Corps** Corps Troops Liberated POWs 5th Colonial Infantry Regiment 2nd Armored 3d Colonial Infantry 9th Colonial Infantry Far East (Colonial) Far East Naval Brigade Infantry Brigade Division Division Division

Figure 2. French Expeditionary Corps, October 1945

June 1954 Indochina Ground Command

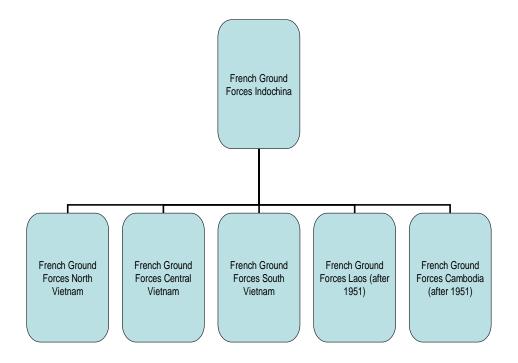


Figure 3. June 1954 Indochina Ground Command

French Algeria September 1942 Ground Organization

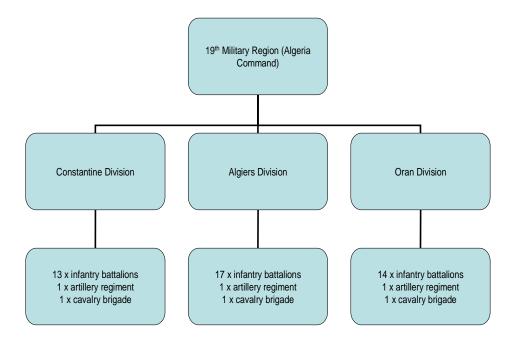


Figure 4. French Algeria September 1942 Ground Organization

Algeria Ground Organization January 1960 10th Military Region General Reserve 11th Infantry Division 10th & 25th Parachute Divisions Joint Sahara Command Oran Corps Area Algiers Corps Area Constantine Corps Area [Zone-equivalent] West Oran Zone 12th West Algiers Zone 9th West Constantine Zone West Sahara Sector Infantry Division Infantry Division 19th Infantry Division Central Oran Zone 29th North Algiers Zone (no North Constantine Zone East Sahara Sector Infantry Division division headquarters) 14th Infantry Division East Constantine Zone North Oran Zone 5th East Algiers Zone 27th 2d Motorized Infantry Armored Division Alpine Infantry Division Division East Oran Zone 4th South Algiers Zone 20th South Constantine Zone Motorized Infantry Infantry Division 21st Infantry Division South East Constantine South Oran Zone 13th Zone 7th Fast Mech. Infantry Division Division

Figure 5. Algeria Ground Organization January 1960

APPENDIX B

SAMPLE MOBILE FORCES ORGANIZATIONAL CHARTS

1840s French Mobile Column in Algeria

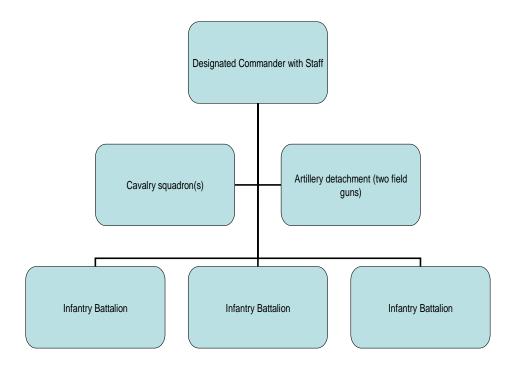


Figure 6. 1840s French Mobile Column in Algeria

1951-54 Indochina Mobile Group

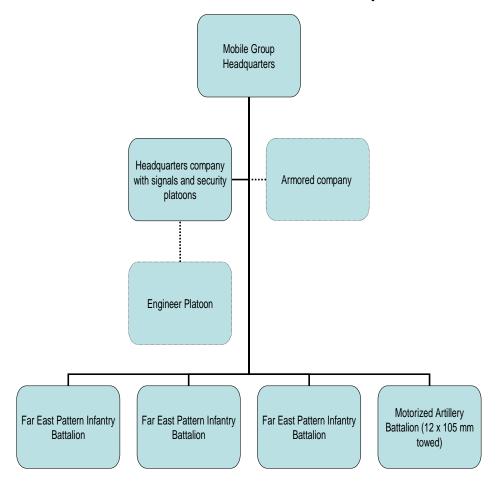
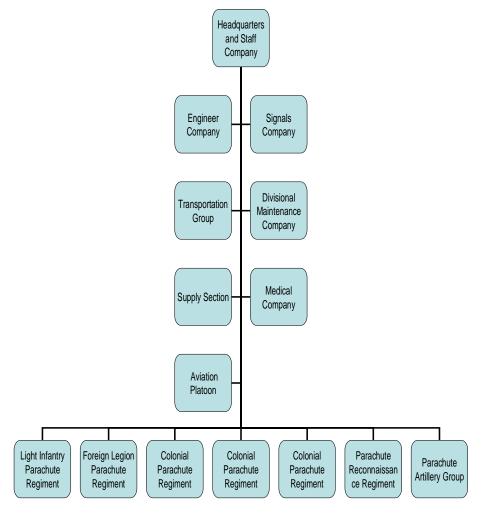


Figure 7. 1951-54 Indochina Mobile Group

Parachute Division 1958



Note: Colonial units were renamed Marine units during 1958.

Figure 8. Parachute Division 1958

APPENDIX C

SAMPLE INFANTRY BATTALION ORGANIZATIONAL CHARTS

1952 Normal Type Infantry Battalion

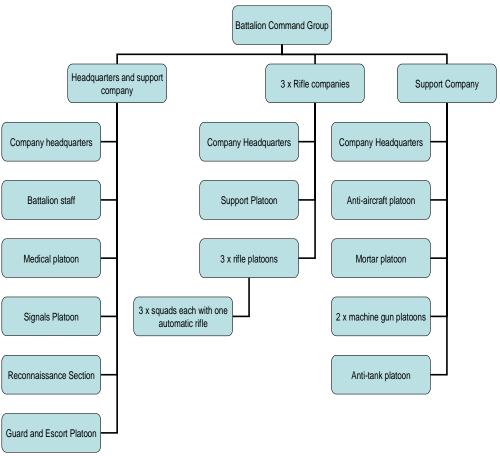


Figure 9. 1952 Normal Type Infantry Battalion

1954 Far East Pattern Infantry Battalion

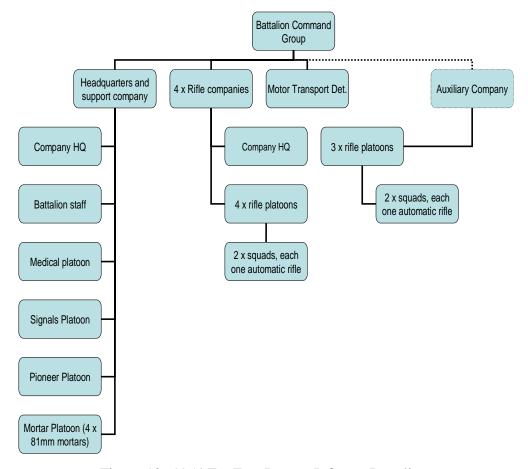


Figure 10. 1954 Far East Pattern Infantry Battalion

1958 Type 107 Infantry Battalion

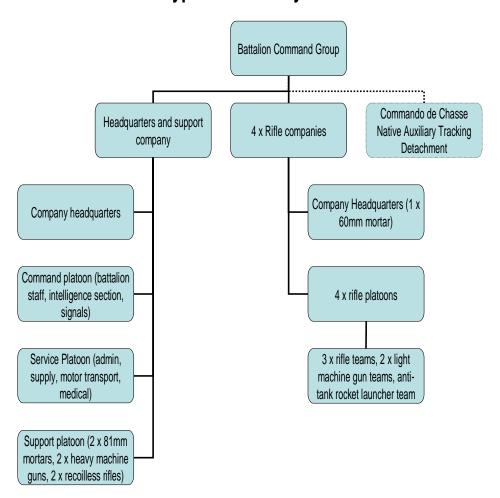


Figure 11. 1958 Type 107 Infantry Battalion

1958 Parachute Regiment

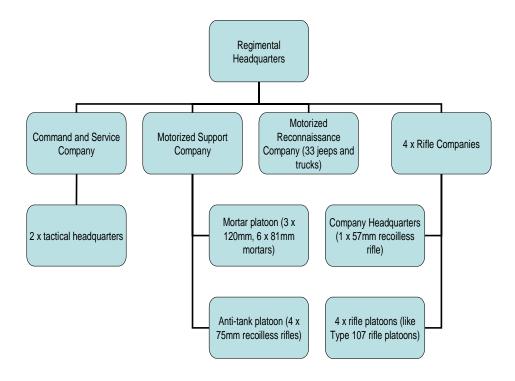


Figure 12. 1958 Parachute Regiment

BIBLIOGRAPHY

Books

- Alexander, Martin S., and J. F. V. Keiger, eds. *France and the Algerian War*, 1954-62. Portland, OR: Frank Cass Publishers, 2002.
- Aussaresses, Paul, General. *The Battle of the Casbah, Terrorism and Counter-Terrorism in Algeria*, 1955-1957. New York, NY: Enigma Books, 2002.
- Beaufre, Andre. *The Suez Expedition*, 1956. New York, NY: Frederick A. Praeger, Inc., Publishers, 1969.
- Beckett, Ian R. W. Modern Insurgencies and Counter-Insurgencies: Guerrillas and their Opponents since 1750. New York, NY: Routledge, 2003.
- Beckett, Ian R., and John Pimlott, eds. *Armed Forces and Modern Counterinsurgency*. New York, NY: St. Martin's Press, 1985.
- Bergot, Erwan. *Gendarmes au Combat; Indochine, 1945-1955*. Paris: Presse de la Cite, 1987.
- Bodard, Lucien. *The Quicksand War: Prelude to Vietnam.* Boston, MA: Little, Brown and Company, 1967.
- Callwell, C. E., Colonel. *Small Wars, Their Principles and Practice*. Nebraska: University of Nebraska Press, 1996.
- Croizat, Victor, Lieutenant Colonel. *Vietnam River Warfare*, 1945-1975. Dorsett, UK: Blandford Press, 1984.
- Debay, Yves. *Troupes de Marine*. Paris: Histoire et Collections, 1996.
- Debay, Yves, and Alan McKay. French Foreign Legion Paratroopers. Paris: Histoire et Collections, 2002.
- Dunstan, Simon. *Vietnam Tracks, Armor in Battle, 1945-1975*. Novato, CA: Presidio Press, 1982.
- Devillers, Philippe, and Jean LaCouture. *End of a War; Indochina, 1954*. New York, NY: Frederick A. Praeger, Publishers, 1969.
- Ellis, John, and Michael Cox. *The World War I Databook: The Essential Facts and Figures for all the Combatants*. London, UK: Aurum Press, Ltd., 1993.

- English, John A., and Bruce I. Gudmundsson. *On Infantry*. Rev. ed. Westport, CT: Praeger Publishers, 1994.
- Fall, Bernard. Street Without Joy. Harrisburg, PA: Stackpole, 1966.
- Fehrenbach, T. R. *This Kind of War, Korea: A Study in Unpreparedness.* New York, NY: Pocket Books, Inc., 1964.
- Galula, David. *Counterinsurgency Warfare: Theory and Practice*. New York, NY: Frederick A. Praeger, Publisher, 1964.
- Horne, Alistair. A Savage War of Peace. New York, New York: Viking Press, 1977.
- Kelly, George Armstrong. *Lost Soldiers: The French Army and Empire in Crisis*. Boston, MA: The M.I.T. Press, 1965.
- Koburger, Charles W. *The French Navy in Indochina, Riverine and Coastal Forces,* 1945-1954. Westport, CT: Praeger Publishers, 1991.
- _____. *Naval Expeditions: The French Return to Indochina, 1945-1946.* Westport, CT: Praeger Publishers, 1997.
- . Naval Strategy East of Suez: The Role of Djibouti. Westport, CT: Praeger Publishers, 1992.
- Mabire, Jean. Commando de Chasse. Paris: Edition Presse Pocket, 1978.
- Martel, Andre. *Histoire Militaire de la France*. Paris: Presses Universitaires de France, 1994.
- Martin, Michel L. "From Algiers to N'Djumena: France's Adaption to Low-intensity Wars, 1830-1987." In *Armies in Low Intensity Conflict*. Edited by David Charters and Maurice Tugwell. New York, NY: Brassey's Defense Publishers, 1989.
- _____. Warriors to Managers: The French Military Establishment since 1945. Chapel Hill, NC: University of North Carolina, 1981.
- Massu, Jacques. La Vrai Bataille D'Alger. Evreux, France: Librairie Plon, 1971.
- McCoy, J. W. *Priests of a Dead God, The French vs the Vietminh, 1st Indochina War.* 2001. E-book accessed from http://www.geocities.com/quikmaneuvers. Internet.
- _____. Secrets of the Viet Cong. New York, NY: Hippocrene Books, Inc., 1992.
- Mosier, John. *Myth of the Great War: How the Germans Won the Battles and the Americans Saved the Allies.* New York, NY: HarperCollins Publishers, 2001.

- Nafziger, George F. *The French Order of Battle in WWII*. West Chester, Ohio: George F. Nafziger, 1995.
- Paret, Peter. French Revolutionary Warfare from Indochina to Algeria. New York, NY: Frederick A. Praeger, Publishers, 1964.
- Pissardy, Jean-Pierre. Commandos Nord-Vietnam, 1951-1954. Paris: Indo Editions, 1999.
- Poole, H. John. *Phantom Soldier, The Enemy's Answer to US Firepower*. Emerald Isle, NC: Posterity Press, 2001.
- Porch, Douglas. "Bugeaud, Gallieni, Lyautey: The Development of French Colonial Warfare." In *Makers of Modern Strategy from Machiavelli to the Nuclear Age*. Edited by Peter Paret. Princeton, NJ: Princeton University Press, 1986.
- _____. *The French Foreign Legion*. New York, New York: Harpers Publishers, 1991.
- Pouget, Jean. Bataillon RAS. Paris: Edition Presse de la Cite, 1982.
- Rustow, W.. *La Petite Guerre*. Translated from German into French by Colonel Savin De Larclause. Paris, France: *Libraire de J. Dumaine*, 1875.
- Shrader, Charles R. *The First Helicopter War: Logistics and Mobility in Algeria, 1954-1962.* Westport, CT: Praeger, 1999.
- Simpson, Howard R. *Tiger in the Wire: An American in Vietnam, 1952-1991.* McClean, VA: Brassey's Inc., 1992.
- Stanton, Shelby L. Vietnam Order of Battle. New York, NY: Galahad Books, 1986.
- Stone, David. Dien Bien Phu. London: Brassey's, 2004.
- Trinquier, Roger. *Modern Warfare: A French View of Counterinsurgency*. London: Pall Mall Press, 1964.
- Tsouvas, Peter G. Changing Orders, The Evolution of the World's Armies, 1945 to the Present. New York, NY: Facts on File, 1994.
- Windrow, Martin. *The Algerian War, 1954-1962*. London: Osprey, 1997.

 ______. French Foreign Legion, 1914-1945. London, Osprey, 1999.

 _____. French Foreign Legion since 1945. London, Osprey, 1996.

 _____. The French Indochina War, 1946-1954. London, Osprey, 1998.

- _____. The Last Valley: Dien Bien Phu and the French Defeat in Vietnam. Cambridge, MA: De Capo Press, 2004.
- Windrow, Martin, and Wayne Braby. French Foreign Legion Paratroops. London, Osprey, 1985.

Periodicals

- Argoud, Lieutenant-Colonel. "The Armored Arm in the Atomic Age." *Military Review* 34, no. 10 (10 June 1957): 90-94.
- Cazorla, Christophe. "Concept d'emploi et evolution statutaire des suppletifs Durant la guerre d'Algerie." Revue Historique Des Armees 4 (2002): 68-77.
- Command and General Staff College. "The French Far East Marine Brigade." *Military Review* 37, no. 7 (October 1947): 111-112. Translated and digested from an article in "*La Revue Maritime*," March 1947.
- Croizat, Victor J., Colonel. "The Algerian War." *Marine Corps Gazette* (December 1957): 44-51.
- David, Francois. "Deux theatres, un meme conflit? Le poids de l'Union française sur l'integration atlantique 1952-1956." Revue Historique Des Armees 236 (2004): 18-32.
- Estival, C. R., Contreamiral. "Le Concept de Dinassaut de la guerre d'Indochine a la guerre du Viet-Nam." Revue Historique Des Armees 3 (1993): 110-121.
- Fremeauz, Jacques. "La Gendarmerie en guerre d'Algerie." Revue Historique Des Armees 4 (2002): 8-12.
- Garneir, PierreLouis. "La Guerre d'Algerie et la consecration de l'ALAT." Revue Historique Des Armees 4 (2002): 20-26.
- Gravrand, Jean Francois, *Capitaine de Corvette*. "French Marines." *Marine Corps Gazette* (September 1957): 44-48.
- Juin, Marshal A. "National Defense and Military Resources." *Military Review* 37, no. 9 (December 1957): 72-76.
- Le Page, Jean-Marc. "Le Quotidien de la pacification au Tonkin." Revue Historique Des Armees 1 (2003): 35-43.
- Medard, Frederic. "Le Soutien de l'armee française pendant la guerre d'Algerie 1954-1962." Revue Historique Des Armees 4 (2002): 25-37.

- Neviaski, Alexis. "L'Audace de rail: les trains blindes du Sud-Anam." Revue Historique Des Armees 1 (2004): 12-18.
- Noulens, Thierry. "L'utilisation des chiens militaries pendant la guerre d'Algerie." Revue Historique Des Armees 4 (2002): 36-48.

Government Documents

- Army High Command. "The French Army." US Army Intelligence translation of [German] Foreign Armies West Report.
- Croizat, V. J., Colonel, trans. A Translation from the French: Lessons of the War in Indochina. Vol. 2. Santa Monica, CA: RAND Corporation, 1967.
- French Army Report (Author and Translator unknown; apparently the French Army Material Service staff in Indochina 1954 or 1955). *Lessons to be Drawn from the War in Indo-China*. DTIC File AD804 375-3.
- French Army Report (Author and Translator unknown). *Lessons from the Indochina War Volume 3*. DTIC File AD804377-3.
- G2, FTNV. "Combat Notes from the War in Indochina." US Army Intelligence translation dated 1954.
- Hooper, Bickford, Dean C. Allard, and Oscar P. Fitzgerald. *The United States Navy and the Vietnam Conflict*. Vol. 1, *The Setting of the Stage to 1959*. Washington, D.C.: Naval History Division, Department of the Navy, 1976.
- Khuyen, Dong Van. *The RVNAF*. Washington, D.C.: US Army Center of Military History, 1980.
- Melnik, Constantin. *The French Campaign Against the FLN*. Santa Monica, CA: The RAND Corporation, 1967.
- Mountbatten, Vice Admiral the Earle of Burma. *Report to the Combined Chiefs of Staff by the Supreme Allied Commander South-East Asia, 1943-1945.* London: His Majesty's Stationary Office, 1951.
- National Intelligence Estimate 91. "Probable developments in Indochina through 1954, Annex A." 1953. Report On-line available from http://mtholyke.edu/adad/intrel/pentagon/doc15.htm. Internet accessed 17 September 2004.
- Nutt, Anita Lauve. Regroupment, Withdrawals, and Transfers-Vietnam: 1954-1955, Part I. Santa Monica, CA: The RAND Corporation, 1969.

- Peterson, A. H., G. C. Reinhardt and E. E. Conger, eds. *Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: The Algerian War*. Santa Monica, CA: The RAND Corporation, 1963.
- Radford, Admiral Arthur. "The Navarre Concept for Operations in Indochina." Memorandum for the Secretary of Defense by the Chairman of the Joint Chiefs of Staff, 28 August 1953. Report On-line available from http://www.mtholyoke.edu/adad/intrel/pentagon/doc17.htm. Internet accessed 11 December 2004.
- Spector, Ronald H. *United States Army in Vietnam, Advice and Support: The Early Years* 1941-1960. Washington, D.C.: Center of Military History, 1983.
- Trapnell, Major General Thomas J.H. JR. "Remarks made by Major General Thomas J.H. Trapnell, JR., former Chief of the Military Assistance Advisory Group (MAAG), Indochina, 3 May 1954." Report On-line available from http://mtholyke.edu/adad/intrel/pentagon/doc41.htm. Internet accessed 12 December 2004.
- Trinquier, Major Roger. "Employment of Parachute Troops in Indochina." US Army Intelligence translation of G2, FTNV Report, 1950.
- US Army Command and General Staff College. *ST 7-100-1 Infantry Division*. Fort Leavenworth, KS: US Army Command and General Staff College, 1959.
- Vigneras, Michael, *Rearming the French*. Washington, D.C.: Office of the Chief of Military History, 1957.

Other Sources

- Carlyle, Thomas. *The French Revolution: A History*. Book on-line. Available from http://www.classicauthors.net/Carlyle/FrenchRevolution/FrenchRevolution154.html. Internet. Accessed 16 April 2005.
- Corum, Dr. James S. "American copy of British Colonial Air control attempts?" Article on-line. Available from http://www.geocities.com/equipmentshop/colonialairpower.htm. Internet. Accessed 13 November 2004.
- DGSE. "*Unite DGSE*." Report on-line. Available from http://www.dgse.org/index. Internet. Accessed 15 December 2004.
- Leulliot, Nowfel and Danny O'Hara. "Indo 1945-1954, From Haiphong ot Dien Bien Phu." Article on-line. Available from http://members.lycos.co.uk/Indochine/misc/glossary.html. Internet. Accessed 20 January 2005.
- Ministere de la Defense. Report on-line. Available from http://www.defense.gouv.fr/sites/terre/decouverte/presentation_de_l_armee_de_terre/organisation_et_localisat

ion_des_unites/chaine_des_forces/la_chaine_des_forces. Internet. Accessed 20 December 2004.

Morvan, J-Y. "2eme Regiment Etranger de Parachutistes." Article on-line. Available from http://www.2eme-rep-moremajorum.com/. Internet. Accessed 12 December 2004.

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